

NATION'S BUSINESS





In 76 years we've seen nothing that can match
THE 1941 BOTTLING OF FOUR ROSES

FOR FIVE YEARS AND LONGER, we've felt sure that the special whiskies we'd reserved for the 1941 Bottling of Four Roses would be extraordinarily fine.

We felt sure because of the painstaking care that went into their making . . . and because of the added knowledge, and added skill we applied to their aging.

But even we ourselves could not foresee the complete magnificence that has crowned the 1941 Bottling of Four Roses. It's whiskey finer than any we have ever known—

and we've known many fine whiskies in our time. It's a whiskey we're certain you, too, will put in a class apart and above all others.

So—no matter when you last tasted Four Roses—a new and thrilling experience awaits you in this 1941 Bottling. Won't you try it—today?

Four Roses is a blend of straight whiskies—90 proof. The straight whiskies in this product are 5 years or more old. Frankfort Distilleries, Inc., Louisville & Baltimore.

EVERY DROP IS 5 YEARS OR MORE OLD

Shake Hands with Our Contributors

HOW SOCIALISM has taken hold in northeastern Mississippi where citizens pride themselves on their independence, but are apparently unaware that the very system they hate has become established among them, is the subject of an article by **Larston D. Farrar**.

Mr. Farrar is secretary of Corinth, Miss., Chamber of Commerce and freely admits that business men as well as farmers in his state with strong prejudices against Socialism are taking part in activities which they do not recognize as revolutionary.

The amount of time lost from general illnesses is 15 times as great as the total lost from both accidents and occupational diseases, according to the United States Public Health Service. When **Helen Morgan**, a free lance writer, read that statement she started a personal investigation of industrial firms who were dispensing daily rations of vitamins to their workers in order to build up resistance against colds. What she discovered is the subject of this article.

T. J. Woofter, Jr., is director of research of the Federal Security Agency and president of the Population Association of America.

J. George Frederick is president of The Business Bourse, a New York sales research organization.

Farnsworth Crowder has been reporting the "American Scene" for newspapers and periodicals since 1928.

He became interested in the subject of "citizen taxpayer associations" while working with the Citizens Committee of Colorado Springs and later examined the Department of Government Management at Denver University where young men are prepared for careers in the critical analysis of local government problems.

After this experience and an investigation of citizen groups throughout the country, he prepared this summation of his study for NATION'S BUSINESS.

Oren Stephens is on the staff of the *Arkansas Democrat* of Little Rock. He is a staunch defender of America's young men.

In his opinion (he is one of them) their accomplishments give the lie to critics who charge that our young fellows aren't as capable as their fathers were before them.

NATION'S BUSINESS for April, 1941

Contents for April 1941

	PAGE
Socialism in a Potato Sack	15
By LARSTON D. FARRAR	
Making Bullets Out of Vitamins	17
By HELEN MORGAN	
Travel Also Broadens Social Issues	20
By THOMAS J. WOOFTER, JR.	
Your Secretary is a Lady	23
By J. GEORGE FREDERICK	
A Fourth Estate for Government	26
By FARNSWORTH CROWDER	
Pipe Growing Time in Missouri	30
By JAMES MCQUEENY	
The Case for Construction	33
Red Tape for Lamp Wicks	72
By WILLIAM A. MCGARRY	
"Enthusiality" Builds Better Cities	80
By OREN STEPHENS	
Seventy Years in the "Klompen" Business . . .	104
By PAUL W. KEARNEY	

The Regular Features . . .

<i>Through the Editor's Specs</i>	7
"If Only—"	BY MERLE THORPE 13
<i>Washington and Your Business</i>	By HERBERT COREY 66
<i>The Map of the Nation's Business</i>	By FRANK GREENE 78
<i>No Business Can Escape Change</i>	94
<i>The Money Markets</i>	By CLIFFORD B. REEVES 96
<i>Memo . . . for Busy Readers</i>	118
<i>Thinkative Counter Selling</i>	126

NATION'S BUSINESS • CHAMBER OF COMMERCE OF THE U. S.

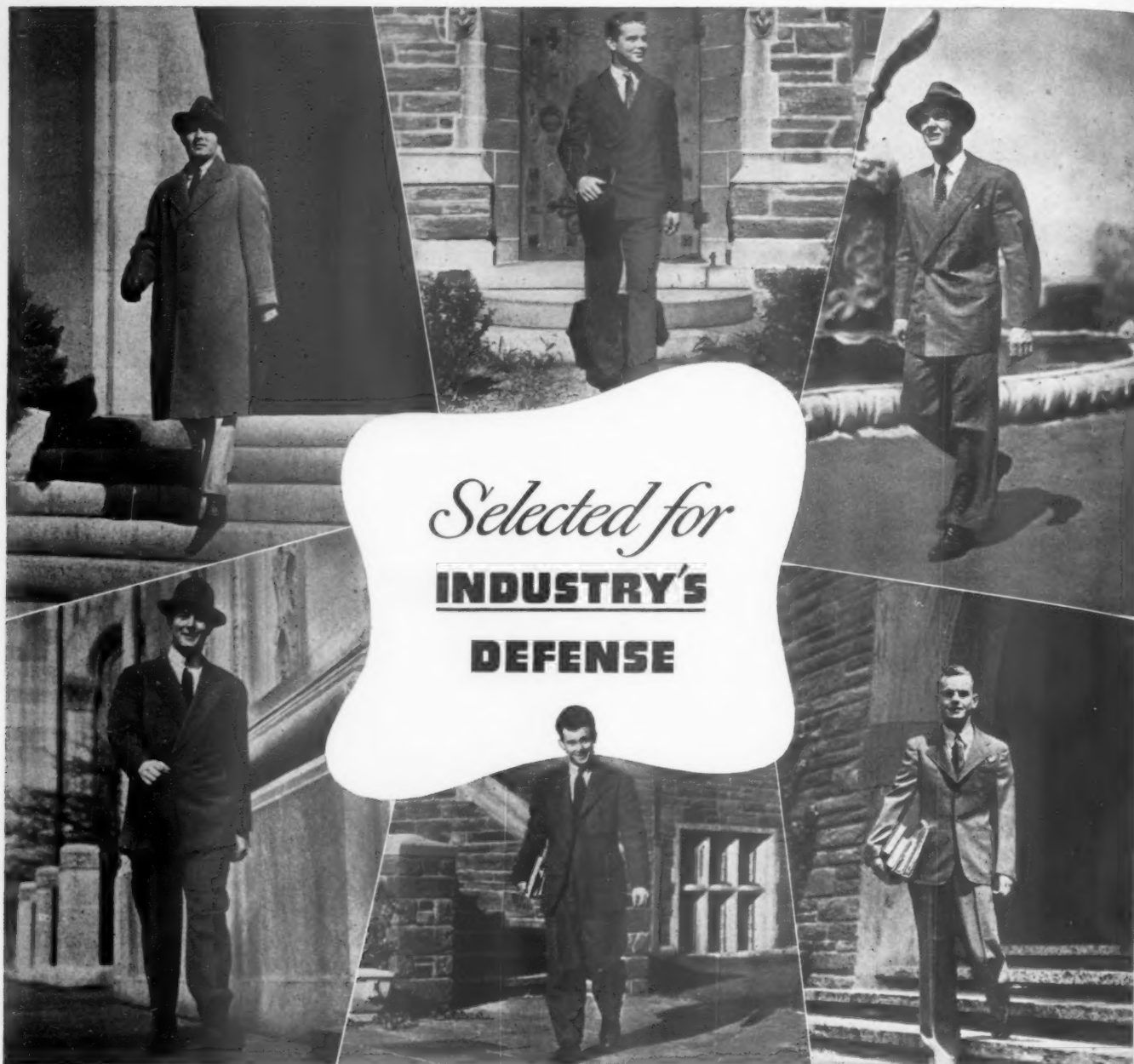
VOLUME 29

Merle Thorpe, Editor & Publisher

NUMBER 4

Managing Editor, RAYMOND C. WILLOUGHBY; Business Manager, LAWRENCE F. HURLEY; Director of Advertising, ORSON ANGELL.

GENERAL OFFICE—Washington, U. S. Chamber Building. BRANCH OFFICES—New York, Graybar Bldg.; San Francisco, 333 Pine Street; Dallas, 1101 Commerce St.; Chicago, First National Bank Building; Atlanta, Chamber of Commerce Building; Canadian representative, 530 Board of Trade Building, Montreal, Quebec. As the official magazine of the Chamber of Commerce of the United States this publication carries authoritative notices and articles in regard to the activities of the Chamber; in all other respects the Chamber cannot be responsible for the contents thereof or for the opinions of writers.



Selected for
INDUSTRY'S
DEFENSE

Again many young men . . . from graduating classes of leading colleges and universities . . . have been selected to train for a career in representing the American company that first offered liability insurance to business firms — American Mutual.

Each summer, several dozen young men undergo supervised training, preparatory to many months of field work under experienced insurance consultants. Those who succeed in passing a most rigid test will ultimately become servants of our policyholders. This year, more than ever before, they face an important responsibility — that of learning how best to defend American Industry against the costs and delays that accidents cause.

LESSONS IN SERVING AMERICAN INDUSTRY

Meanwhile, they are learning what *mutuality* means. That American Mutual is mutual in every sense — owned by its policyholders, operated for its policyholders, to save them on insurance costs and accident losses.

They are learning the importance of giving a business man a constructive insurance *plan*. Because they will be on salary, will offer practically all liability lines, their counsel will be unbiased, comprehensive.

They are learning, too, other aspects of American Mutual's service . . . the 20% policyholder dividend that has always been returned as a share of earnings . . . accident-prevention aid by experts on industrial safety and

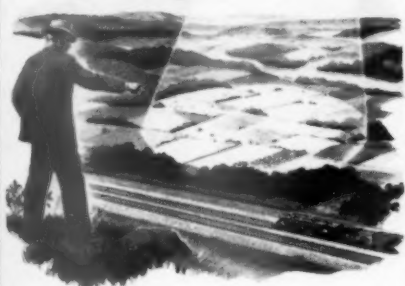
property protection . . . nationwide claim service including specialized doctors for workmen's compensation cases . . . publications which crystallize American Mutual's ever-broadening efforts to *make all work safe*.

Among these publications is *American Mutual Magazine*, source of valuable information on loss prevention in business and industry. Write for a free copy to Department Q3, 142 Berkeley Street, Boston, Mass.



AMERICAN MUTUAL LIABILITY INSURANCE COMPANY, Home Office BOSTON, MASS. Branches in 62 of the Country's Principal Cities

"There's the Spot!"



THIS man is right. Hundreds of others have said the same thing. And they've been right. Here's the proof.

During the past ten years alone, 1,833 new industries and additions to plants (representing 94 distinctly different kinds of industries) have been established in the territory served by the Norfolk and Western Railway. That's an average of one every other day. And that's steady development . . . even during the darkest days of the depression. (The 1940 record shows the trend: 236 plants! \$230,000,000 investment!)

And yet, the surface in this territory has hardly been scratched. For here is a land where there's plenty of room to grow; a territory rich in the essentials to sound industrial development—an abundance and variety of raw materials, intelligent native labor, a climate for year-around work, plenty of fuel and power, and quick access to the nation's greatest markets by precision railway transportation—East, West, North, and South.

The N. & W.'s Industrial and Agricultural Department at Roanoke, Va., can help you solve your problem of plant location. Write or call for confidential information.

The Territory of the
NORFOLK and
WESTERN
Railway
FOR BETTER PLANT LOCATIONS

COPY, 1941 N. & W. RY.

THROUGH THE *Editor's Specs*

An Oscar to Harold

A GOOD word is "tolerance." Everybody is for it. But when a group of churchmen calling themselves the Protestant Digest Associates award their 1940 citation to Secretary Ickes as a notable example of tolerance somebody seems to be confused. That is, as to what the word means. Maybe we're the one out of step.

After the presentation the recipient made a few tolerant remarks denouncing "appeasers," "traitors," "Quislings" and other vipers. There was applause and the exercises ended with everyone shaking hands with Mr. Tolerance of 1940.

No hard feelings

TALK of tolerance brings to mind the barrage of letters evoked by our editorial in the February number, "National Defense—For War? For Peace?" Our correspondents are both thumbs up and thumbs down, but always vehement and positive.

"Refreshing to read such a sane statement in the midst of the hysteria that is now flooding us," from Gen. R. E. Wood of Sears Roebuck & Co., represents the "pro" stack. These good words cheered the editorial heart, but they're only about 70 per cent of the story.

Turning to the "con" stack we find a missive that bristles with "narrow-minded, short-sighted . . . stupid . . . drivel and patter." This is the tolerant judgment of a San Francisco reader whose identity we tolerantly shield. "You must be either for America or for Hitler," writes a man from Delaware. "I think you are for Hitler and I don't want your magazine to come to my office any more."

Can we quarantine wars?

TO THOSE who dream of peace for all time in Europe we recommend the study of a Time Table of Europe's wars which came to us from Lawrence Sullivan. It shows that, since 1800, the nations of that battle-scarred continent have been involved in no less than 63 wars. Nine years was the long-

est period of peace, and that was broken in this hemisphere by our own war with Mexico.

Priorities on words

LATEST EXTREME of oversimplification:

The Printing trades unions say radio has made 25,000 printers jobless. They want a law passed to restrict commercial broadcasting to 25 per cent of the time.

More than that, they ask that the broadcasters' wings be clipped by taxing them an extra \$12,000,000 or so a year.

Aren't the printers forgetting their golden rule? If action were taken on their plea what would prevent the radio men from praying with equal logic that the printing paper supply be rationed, on the ground that the printed word is unfair competition with the spoken?

That creeping collectivism

MISSISSIPPI has a reputation for being rough on imported radicals who come into the state to preach economic and social free love.

But when the real thing in socialism arrived, Mississippians failed to recognize it and embraced the doctrine, whiskers and all.

Just how it is happening we find in Mr. Farrar's "Socialism in a Potato Sack," in this issue. It is an amazing document.

Any question about the realism in this picture should be resolved by the recent admission of the state welfare director that more than one-third of Mississippi's 2,000,000 people are receiving direct federal aid in the form of "surplus commodities" alone.

And that at a time when the national index of production is 23 points above 1929.

The English call 'em "ladders"

WASHINGTON women are still talking about the odd weather freak of February 18 that caused a run of silk stocking runs. High wind and dust that day reduced many hundreds of

Time is Precious to America in 1941

... don't Waste a Minute!



...start by saving figuring time on the

Underwood Sundstrand

ADDING-FIGURING MACHINE



NO one knows better than *you* how much office time is lost when important figuring work is delayed or when figuring errors occur. Underwood Sundstrand Adding-Figuring Machines can help you *avoid* this waste and cut down figuring costs as well.

Underwood Sundstrand gives you more speed for the *same* reason it gives you greater accuracy. It *simplifies*! There are only 10 numeral keys on the Underwood Sundstrand and these are so arranged that even *beginners* use the Touch Method of operation almost from the start. The operator keeps her

Copyright 1941, Underwood Elliott Fisher Company

eyes on the work. There's no head-swinging between "copy" and machine to *invite* mistakes.

Because we know how Underwood Sundstrand performance compares with that of other machines, we invite you to *try* this streamlined adding-figuring machine in your own office with one of your own staff at the keyboard. Telephone our local Branch and we'll deliver a machine without obligation to you of any kind.

UNDERWOOD ELLIOTT FISHER COMPANY
One Park Avenue, New York, N. Y.
Sales and Service Everywhere

Underwood Elliott Fisher Speeds the World's Business

women's hose to a state that suggested they had endured the rigors of a football game. Next day the adjustment counters of the stores experienced the aftermath in a flood of claims for replacement. Some of the stores cheerfully made good, even for what seemed to them an Act of God. The real cause is still pretty much a mystery.

Many New Yorkers will recall the sequel to that foggy winter day several years ago when tiny holes appeared in thousands of woolen coats, suits and dresses that had been worn outdoors. The generally accepted explanation of that visitation was that a heavy saturation of sulfur dioxide in the air had oxidized into sulfuric acid, a deadly foe of woolsens.

If Hamilton came back

CARL HEYEL of New York City questions our failure to include Alexander Hamilton among the business men founding fathers. (Specs, January number.) No offense to the gallant Hamilton but, after all, his profession was the law.

If Hamilton could look in on the scene today he would be puzzled by some of his new-found devotees. Mayor La Guardia, who in all other respects probably considers the first Secretary of the Treasury as the first economic royalist, eulogizes the Hamiltonian theory of a strong centralized government. And Borough President Isaacs of Manhattan, the man who insisted on employing an admitted Communist as his secretary, lauds Hamilton for his contribution to the foundation of democracy.

"A republic, sir, not a democracy," would be Hamilton's correction. And if Franklin were present he might add, "But you haven't kept it, as I charged you to."

What about eavesdropping?

NEW YORK legislators have introduced a bill making it a misdemeanor to dun a delinquent debtor by phone.

It used to be that those who failed to pay their bills were jailed. Soon we will be jailing creditors for trying to collect past-due accounts. *O mores! O tempora!*

Back to due process

FROM an Indiana reader who appears to be a bit "het up":

Of all the sophistical frauds that this cockeyed period has spawned, the report of the Acheson Committee on Administrative Procedure wins the cake. With the verbiage hacked off, it rejects the Walter-Logan bill and proposes instead that a new Federal Administrative Procedure Office be set up to regulate the regulators. Another committee has labored and brought forth a new red-tape-rolling su-

per agency! Another \$10,000 a year job for some faithful hack turned down by the voters of his home state!

It's a mistake to hope to clear up this administrative law jungle by trying to organize efficiency into it. You can have efficiency with a Caesar. What we want is a restoration of legislating by Congress and adjudicating by the courts. It's liberty first, then efficiency, that should be the aim. Neither is possible with the existing maze of quasi-legislative, quasi-judicial agencies. To try to correct the mess by creating another agency is like hiring a watchman to watch the watchman.

We see in the news

THAT the A.A.A. will pay special subsidies to southern farmers for planting vegetable gardens . . . that a New York City woman, refused an immediate relief check, deserted her four children, leaving them in the welfare office . . . that a thrifty Detroit took his relief allowance for rent and bought a home . . . that Mrs. Roosevelt expects "thoughtful" consumers to resist the spending lure and put their savings into Government securities . . . that 4,000 European refugees a month are entering the United States . . . that the W.P.A. is re-plotting the orbits of Mercury and Mars . . . that coal operators in the Arkansas-Oklahoma fields are donating 1,000 tons of coal to needy non-relief families in St. Louis.

Reason dethroned

WE'RE always skeptical when we hear some woman speaking "on behalf of 12,000,000 mothers" or some lofty-browed intellectual voicing the soulful aspirations of "we consumers." And so when we read that a young woman from Barnard College told a New York consumers' conference that youth wants to be moved by buying appeals to reason rather than emotion, we rise to ask her a question or two.

Is it reason and judgment that sold young people the Youth Congress, the goldfish-swallowing fad in our colleges, companionate marriage yearning and the nudist colonies?

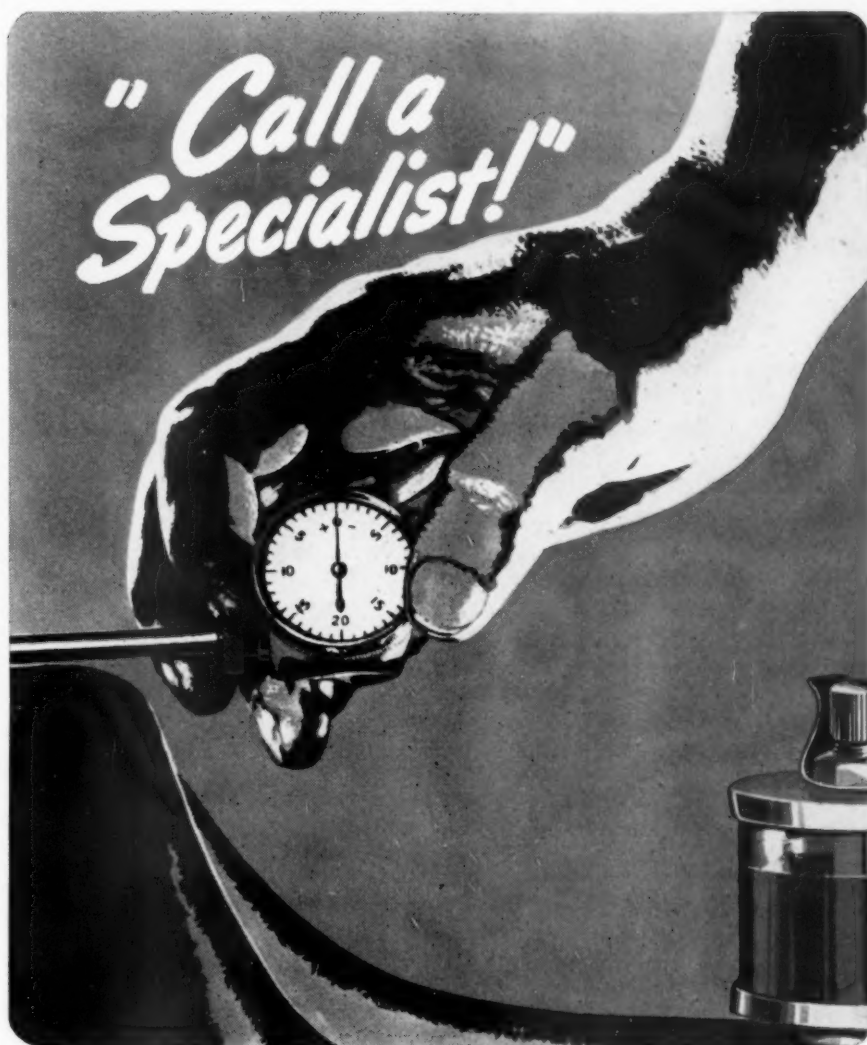
Do young women pick their boy friends by syllogism or by methods less related to Aristotelian logic?

Is it reason and judgment that guide young women in buying spring hats or fiction magazines? Is it the motor or the upholstering and paint job that decides their purchases?

Consider the bee!

LETCATCHIE, Ala., has only about 500 people but it led the country last year in the shipping of bees to northern points. Out of 118,000 cages, weight 382 tons, handled by American Railway Express during the last season, 11,000 cages came from Letcatchie.

The Southern live bee business has



SURGEON — lawyer — C. P. A. . . . Let an important or critical situation lead you to summon one of these, and you see to it that the aid you receive comes from a specialist of undoubted skill.

The inspecting and insuring of power-plants is a specialty too. It calls for intensive study and long experience. Have you ever seen the havoc — in property damage, financial loss, human tragedy perhaps — wrought by the terrific explosion of a boiler or the devastating crash of an engine, turbine or fly-wheel? Then, with the ever-present possibility of power running wild in *your* plant, you can appreciate the need of making sure the engineering facilities you retain to protect you against such hazards are of the very highest order.

Hartford Steam Boiler specializes in power-plant protection — a form of casualty insurance which is prepon-

derantly engineering. By a wide margin, Hartford is America's leading company of its kind — its writings exceeding the combined volume of the five next-largest underwriters of power-plant insurance.

The seeming "economies" which sometimes tempt compromising on this vital form of security can turn out to be dearly bought. It will pay you to insist on the best. Your agent or broker can readily arrange it for you — with Hartford Steam Boiler.

THE HARTFORD STEAM BOILER INSPECTION AND INSURANCE COMPANY

HARTFORD,
CONNECTICUT



•POWER-PLANT INSURANCE BY POWER ENGINEERS!
—covering Boilers, Steam, Gas and Diesel Engines,
Turbines, Pressure Vessels, Electrical Equipment.



Henry, dear, does our automobile insurance cover everything?

Just what does "everything" mean as applied to automobile insurance?

Here are a few of the things it *should* include. Fire, theft, damage to your car by collision, windstorm, hail and flood . . . emergency towing service . . . liability imposed upon you by law for injuries to other persons or their property—and if your children drive, it is well to have your liability insurance cover their driving other people's cars.

If you are in doubt as to whether your present insurance includes all these

coverages, ask your local agent or broker. He can give you expert advice on how to obtain complete protection at low cost—and on what to do in event of loss . . . which is why the Aetna Fire Group sell only through such agencies.

It is a further satisfaction to know that when your insurance is with a capital stock company, it is backed by both a paid-in capital and surplus. You are never liable for assessment. The AETNA FIRE GROUP, Hartford, Conn., New York, Chicago, San Francisco, Charlotte, N. C., Toronto, Can.



Don't Guess About Insurance
CONSULT YOUR LOCAL
AGENT or BROKER



WARS	CONFLAGRATIONS	DEPRESSIONS
1846 Mexican War	1835—New York City	1819
	1845—New York City	1837
	1851—San Francisco	1843
1861 Civil War	1866—Portland, Me.	1857
	1871—Chicago	1873
	1872—Boston	1873
1898 Spanish-American War	1877—St. Johns, N.B.	1893
	1889—Seattle; Spokane	1907
	1901—Jacksonville, Fla.	1921
	1904—Baltimore	1921
1917 World War	1906—San Francisco	1929
	1908—Chelsea	
	1914—Salem	

Since 1819

through conflagrations, wars and financial depressions, no policyholder has ever suffered loss because of failure of the

AETNA
to meet their obligations.

been growing rapidly to meet the demand in the northern states and Canada, not only by apiaries but for use in the pollenization of certain fruit blossoms.

In cold northern climes the bee mortality is very high, so high that some honey farmers don't even attempt to carry their bees through the winter, but simply replenish the stock each spring.

Scientists say that no single bee can survive cold weather, but collectively in a hive they can because they employ their own heating system. When the temperature gets down to around 55° Fahrenheit the hive starts generating heat by motion. By huddling together and activating themselves the bees are able to warm the hive, if it isn't too cold. Those members on the outside of the mass are gradually worked toward the center and back again until all are warm. In this way they can raise the temperature 20 degrees or so.

To say nothing of dues

DR. KENNETH DAMERON of Ohio State University hopes to see the Consumer Movement give us consumers collective bargaining.

It's a novel idea but somehow we don't warm to it. Collective bargaining has accomplished certain things for labor but it has been pretty tough on the individualist. Now, when it comes to buying, we consumers are incorrigibly individualistic. Some of us want long underwear or unsliced bread loaves. Others prefer to roll their own cigarettes.

If we had to purchase through collective bargaining, the wishes of the majority might force us to change our tastes. That's what complete standardization would mean.

We are disturbed by the implication that, under Dr. Dameron's plan, there might be a National Consumer Relations Board.

If we in the minority were voted down and, let us say, Consumers Union became our exclusive bargaining agency we might have to buy only what Mr. Kallett thinks we need for the good of our souls. That would be annoying to some of us.

Pensions for all

FROM the Advisory Committee on Problems of Old Age of the National Institute of Health comes a proposal for old people's towns in the South, where folks past 65 could spend their last years and their Social Security checks.

All the work would be performed by younger persons. Even the cooking would be done in communal kitchens. The elders would have nothing to do

but cherish their memories and rust away.

Altogether too much mental energy seems to be expended on how to be happy while somebody else does the work. By 1980, about ten per cent of the population will be on the Social Security shelf. Another 30 per cent or so will be dependent youth and children. Nearly 25 per cent of the total will be housewives. Unnumbered millions will be living on pensions. And there will be the horde of government retainers, the biggest unproductive load of all.

Lawrence Sullivan, Washington journalist, has recently compiled an itemized tabulation of the federal Government's payrollers and receivers of its various pecuniary benefits showing that in October, 1940, the number reached the astounding total of 27,794,620.

That doesn't include the Army or Navy, or the national defense workers nor the state, city and county employees and their families. Nearly one-third of our people are now riding on government passes. The number increases with every new law or executive order.

How many productive workers at this rate will be left in 1980 to support the rest of the population? And before they can begin supporting them, how much time will they have to devote to paying public debts and accumulated pensions piled up by their fathers?

Trying to look ahead, one sees a new "Man with the Hoe"—the last of the productive workers—

And on his back the burden of the world.

Troublesome facts

NO PHENOMENON is more remarkable than the hardness of certain fallacies and their persistent lodgement in the human mind, notwithstanding controverting facts. Examples:

Fallacy—That any and all means of furthering foreign trade are justifiable and wise because international trade relations insure peace among the society of nations.

Fact—For years China had been Japan's best customer. Britain was Germany's second best and France her fourth best customer. These facts did not "soften the mind of the world toward peace."

Fallacy—That whenever high wages are paid it is owing to the work of labor unions.

Fact—Statistics in the *International Labor Review* for 1930 showed that real wages in the United States were 190 per cent of those in Great Britain, our nearest rival. That was because and only because product per worker in this country was greater than that in Britain, by practically the same percentage. That production was so high in this country was owing to the relative efficiency of our industry and the incentives offered by the American system as well as the greater efficiency of American labor.

HOW THIS SERVICE HELPS MAINTAIN EMPLOYE MORALE

WHEN a good employe has to worry about bills that he can't pay, his work usually suffers. Yet nearly every worker at some time has emergency expenses—a long illness or serious accident, for instance—which he can't meet out of savings or current earnings.

How workers may borrow

When that happens, where shall he go for the money he needs? Some companies make loans to their employes. Other companies help their employes to operate their own credit unions. But millions of workers must rely on some outside source of credit.

To help these workers most industrial states have passed Small Loan Laws based on the recommendations of impartial students of the small loan problem. These laws make possible the operation of the modern family finance company like Household Finance.

Borrowers are protected

At Household Finance responsible workers can borrow up to \$300, largely on character and earning ability. No endorser is needed. No wage assignment is taken. State laws regulate the transaction for the protection of the borrower. Repayment is made in small monthly installments. Thus the borrower can get out of debt without sacrifice or strain.

Below are some typical loan plans. The borrower may choose the schedule which best fits his own needs. Payments include all charges. Charges are made at the rate of 2½% per month (less in many territories on larger loans.) These charges are substantially below the maximum established by the Small Loan Laws of most states.

WHAT BORROWER GETS

	WHAT BORROWER REPAYS MONTHLY				
	2 pymts	6 pymts	12 pymts	16 pymts	20 pymts
\$ 20	\$ 10.38	\$ 3.63	\$ 1.95		
50	25.94	9.08	4.87		
100	51.88	18.15	9.75	\$ 7.66	\$ 6.41
150	77.82	27.23	14.62	11.49	9.62
200	103.77	36.31	19.50	15.32	12.83
250	129.71	45.39	24.37	19.15	16.04
300	155.65	54.46	29.25	22.98	19.24

Above payments include charges of 2½% per month and based on prompt payment are in effect in seven states. Due to local conditions, rates elsewhere vary slightly.

Borrowers at Household receive experienced guidance in planning their spending to make their incomes go farther. We maintain a staff of home economists to help the consumer be a better manager and wiser buyer. Hundreds of schools use the Household Finance booklets on better buymanship and money management as study texts.

If you employ or supervise men, you are invited to send the coupon for further information. You will be under no obligation.

HOUSEHOLD FINANCE Corporation

Headquarters: 919 N. Michigan Ave., Chicago
One of America's leading family finance organizations, with 289 branches in 191 cities

HOUSEHOLD FINANCE CORPORATION, Dept. NB-4
919 N. Michigan Ave., Chicago, Ill.

Please tell me more about your loan service for wage earners—without obligation.

Name.....

Address.....

City.....State.....



HERE COMES THE
Iron Cavalry
...shod by the G.T.M.

**G.T.M. -Specified
RUBBER TANK TREAD
BLOCKS**

IN modern blitzkrieg armored forces must travel far and fast without breakdown or delay. Yet even the heaviest steel tank treads are surprisingly short-lived under the grind and pound of field operations. Engineers thought of shoeing these caterpillar-footed treads with rubber, since rubber far excels metal in resisting abrasive wear. Tests proved it was the answer. Not only do these rubber-armored treads long outwear naked steel, but they give Uncle Sam's new iron cavalry greater maneuverability, greater speed to deliver a knockout punch. Industry

too finds this rubber-armoring process of great value in protecting equipment used in handling ores and other highly abrasive material. The G. T. M. (Goodyear Technical Man) will be glad to tell you about it. Write: Goodyear, Akron, Ohio or Los Angeles, California — or call the nearest Goodyear Mechanical Rubber Goods Distributor.

THE GREATEST NAME IN RUBBER
GOOD YEAR



"If Only—"

A SAD little figure dodges about in the pages of Napoleon's history—unwilling to be seen, frightened by magnificence, uneasy in the presence of successful violence. That figure is his mother. Only four words of hers live in our minds after 125 years—four pathetic little words pronounced badly in the French which was not her native tongue.

These words she repeated over and over again—to herself, to her son, to the few friends she had among a thousand pretenders to friendship. "*Pourvu que cela dure,*" she would say, with a shake of her head—"If only it lasts!"

"If only"—how many sentences and thoughts start that way nowadays! If only we can eat our cake and have it, too. If only we can beat dictatorship abroad, then we'll come back to the domestic problems we have failed to beat at home. If only the emergency gets over with, we shall then take time to reestablish our faith in hard work, peace, and decent respect for our duties as well as our rights.

"If only" all goes well, we shall give up name-calling, smearing, dividing of our neighbors into sheep and goats. We shall restore the Republic, a form of government which prevented the excesses of unrestrained democracy, and at the same time protected us from despotism.

But now, liberty, free speech, restraint of power, representative government—all those things which made America great—are luxuries. We love them as much as ever. We sing "God Bless America" with a catch in our throats. We wear badges saying "It's *Great* to be an American." When the flag goes by we bare our heads but take a quick glance on either side to make sure our neighbor is as duly respectful.

But let us ask—Bless What America? We need not go far to find the kind of America which we wish blessed. It has been defined in simple words for all to read. Though 150 years old, it has needed no clarification, no amplification.

Read it, Americans, and hope that it lasts.

We, the people of the United States, in order to form a more perfect Union, establish justice, insure domestic tranquillity, provide for the common defense, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity, do ordain and establish this Constitution for the United States of America.

Have we yet formed here such a perfect Union, established such justice, and insured such tranquillity that our *only* work in the world is to protect democracy in England, China, or wherever else it is "threatened"?

Do we provide wholly for the common defense by building tanks, bombers, and a two-ocean navy—forgetting that we are still threatened from within by insolvency, class hatreds and stagnation of personal initiative?

Those who strive to hold America back from the pit of war are not cravens. They are eager for the day when America will "go all out" for representative government. That day will come when exhausted nations seek a peace which only America can provide—a peace negotiated through a nation, strong within and without, feared and respected because it truly has the blessings of liberty secured for itself and its posterity.

To that end American business may dedicate itself. It offers itself whole-heartedly to the job not only of meeting a national crisis but also of regaining, after the war clouds lift, the way of life the founders so greatly planned.

One of those realistic founders had an "if only": when asked, "What kind of a government have you given us, Mr. Franklin?" he replied, "A republic, if you can keep it!" In this time of bewilderment and discouragement, our answer should ring out, "Yes, we must, we can, and we will keep it!"

Merce Thompson



MOST MODERN of America's defense factories will give no hint of their presence, nor their forced-draft, three shift production to night-riders of the skies.

And within these blackout plants where light is controlled, where the temperature, humidity and movement of air are controlled, day and night, summer's heat and winter's storms are indistinguishable. Here more is involved than concealment. Here work can be done to closer tolerances due to control of temperature, and the sabotage of corrosion is eliminated through control of humidity.

York experience dates from the first windowless building in America, the office building of the Hershey Chocolate Company, includes the spec-

tacular S. C. Johnson Plant at Racine, Wisconsin, five of the nine huge blackout buildings of the new Douglas Aircraft Plant at Long Beach, California, and reaches its ultimate expression in the new Ford aircraft engine plant at Dearborn, Michigan, with a 4,400 h.p. air conditioning system.

To help speed the wheels in your plant, keep hands steady and eyes clear, protect materials in process and in storage, York's 56 years of experience, the experience gained in more than 150,000 engineered air conditioning and refrigeration installations, is at your service.

York Ice Machinery Corporation, York, Pa. Headquarters Branches and Distributors throughout the world.



YORK AIR CONDITIONING AND REFRIGERATION

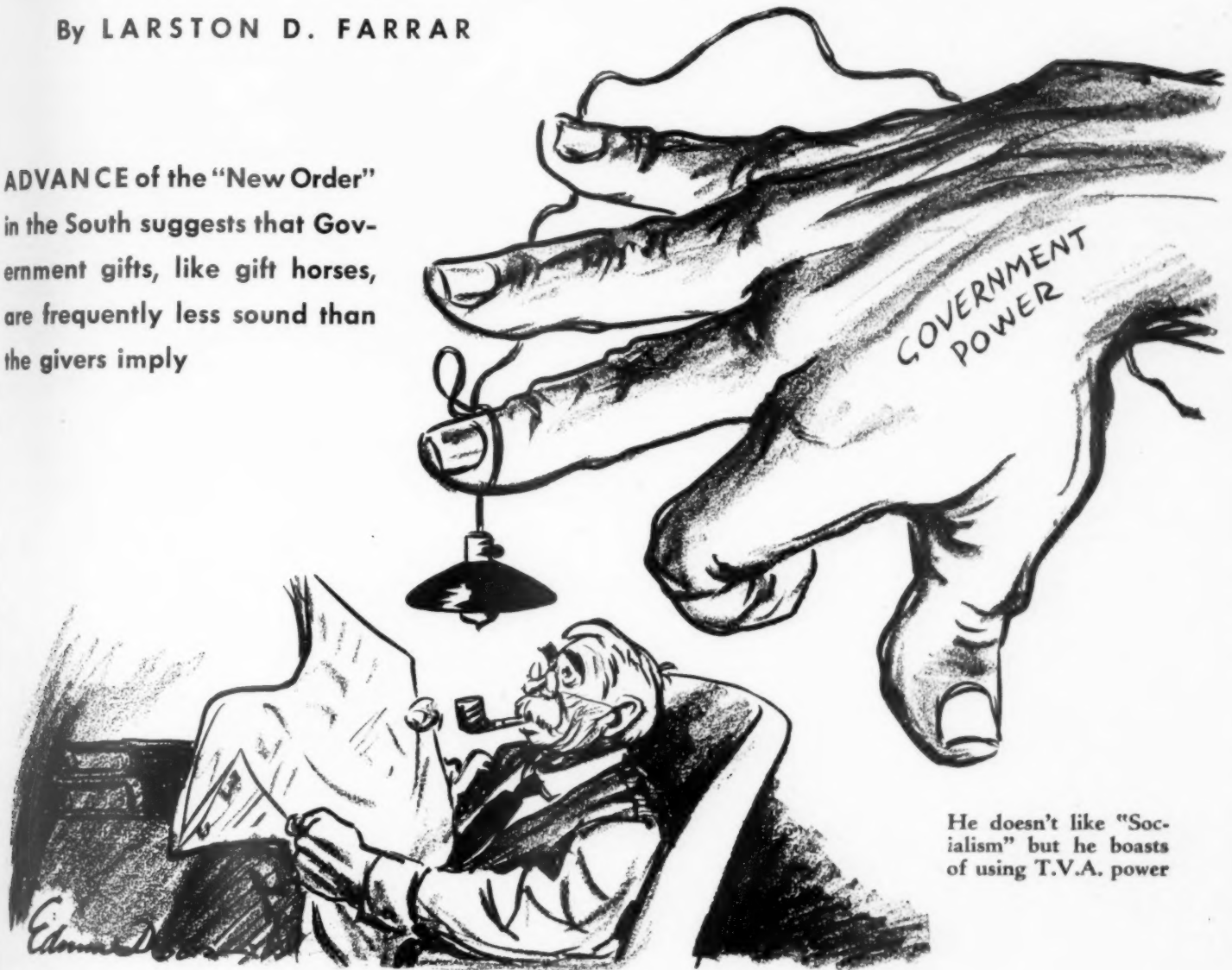
"Headquarters for Mechanical Cooling Since 1885"

A FEW OF THE MANY NATIONALLY-KNOWN USERS OF YORK EQUIPMENT—American Air Lines • Armour • B. & O. R.R. • Bethlehem Shipbuilding
Borden • Canada Dry • Coca-Cola • Curtiss-Wright • du Pont • Eastman Kodak • Firestone • First National Stores • Ford
General Baking • General Foods • General Motors • Goodrich • Norton Company • Paramount Pictures • Pennsylvania R. R.
Procter & Gamble • Shell Oil • Socony-Vacuum • Swift • Texas Company • United Fruit • U. S. Army • U. S. Navy • Woolworth

Socialism in a Potato Sack

By LARSTON D. FARRAR

ADVANCE of the "New Order" in the South suggests that Government gifts, like gift horses, are frequently less sound than the givers imply



He doesn't like "Socialism" but he boasts of using T.V.A. power

IF A stranger were to register at the principal hotel in Tupelo, Miss., and announce that he had come to town with the express purpose of socialising the entire northeast Mississippi congressional district, three things would happen within 24 hours:

1. The word would spread through the city and surrounding territory like wildfire.
2. A group of citizens would confer briefly, designate certain tasks for each member, then disband.
3. While the sheriff went fishing, the stranger would be taken bodily from his room, peremptorily escorted to a waiting automobile, hauled to some point well out-

side the county line and warned never to return on threat of bodily violence.

The good business men, American Legionnaires, Veterans of Foreign Wars, assorted outraged farmers and self-deputized "savers of Democracy" would then return to their homes feeling that they had contributed toward keeping America safe for individualism.

Yet, a typical farmer who might have been in the group would go home, turn on an electric light operated under socialistic methods, go next day to borrow operating capital from a socialistic

bank (the Farm Security Administration office), have his cotton ginned at a government-built, tax-free gin, see his tenants take food commodities from a government-operated dispensary, store his meat in a socialized cold storage plant, and let half a dozen bulletins from the United States Department of Agriculture advancing socialistic ideas lie on his desk all year long.

This farmer, and thousands of his land-brothers, are happy to have a chance to put a "pink" in his place, but they go merrily along without realizing that the very thing they hate by name

is with them in fact. Socialism is not something that "will come" to the South sooner or later, if certain governmental policies are continued.

If socialism advocates the abolition of private property, ownership of industry by the State, collectivistic farming, and dependence of the people on the State for leadership, financial assistance and subsistence, then socialism is indeed in operation today in every section of the South.

Rugged individualism is operating still, it is true, but the two systems cannot long run side by side—one must inevitably give way to the other.

The fact is, the South today is in the midst of a revolution the outcome of which must be decided by its business men and its political leaders as much as by national policies formulated in Washington. It is up to the "home folks" to refuse to swallow the fallacies brought to them by government "experts" who have thought all problems through—on paper. In view of the fact that the home folks seem unwilling to refuse certain policies, thoughtful persons are beginning to wonder whether business can long weather the political whirlwind that is growing into a cyclone.

To leave generalities, let us examine

a typical farming section of one of the most traditionally individualistic states of the Deep South—Mississippi. Socialism is already in control in the ten counties of northeastern Mississippi, comprising the First Congressional District, whose congressman is John E. Rankin, one of the foremost advocates of public control of electrical power.

Socialism has a big grab

REPRESENTATIVE Rankin boasted recently—and rightly so—that, where 20 years ago there was not one publicly-owned mile of electric wire in his congressional district, today there are only two small private companies serving a portion of two counties in this territory "and they'll be out of business soon." On the other hand, he points with pride to the fact that cooperative electric power associations, operating under supervision of either the Rural Electrification Authority or the Tennessee Valley Authority, rule the roost in virtually every section of his district.

Now, it is not my purpose to say whether this change is good or bad, or to argue for or against privately-owned power companies. My point is that the present power situation in this district represents socialism because the Gov-

ernment controls the source of the power and the cooperatives are operated under its supervision. This situation fits the definition of "state socialism" as stated in all the economics books I have read.

This is only one of dozens of examples of socialism found in this congressional district, which may be "falling" or "advancing" (depending upon your outlook) more quickly than other districts, but is surely "typical" of congressional districts throughout the South.

Electric power can be overlooked altogether, however, and we can still see socialism operating alongside private business and taking unfair advantage of its once-established competitor.

Let's examine the money-lending situation for another clear case. On one street in Corinth, Miss., county seat of Alcorn County, you will find an ancient, dignified-appearing building housing a bank. This institution, whose owners have been hard-working, thrifty men since childhood, is in business to make a fair profit. It, like all privately-owned businesses today, must pay taxes—social security taxes, unemployment compensation taxes, income taxes, a capital stock tax, *ad valorem* taxes, and

(Continued on page 122)

The bank pays taxes which its competitor, the Farm Security Administration, uses to put the banker out of business



Making Bullets Out of Vitamins

By HELEN MORGAN

BUSINESS leaders freed their plants from accidents. The next job is to conquer sickness

A FIFTH column made up of colds, dyspepsia, bronchitis, grip and heart trouble threatens the success of this country's preparedness effort. So serious is the threat from this source that a general health program has been mapped out under the guidance of Paul V. McNutt, who boasts the imposing title of "coordinator of all health, medical, welfare, nutrition, recreation and other related fields of activity affecting the national defense."

In this campaign industry will naturally take a leading part because full speed production depends upon the stamina and energy of America's workers. Stepped up production will demand heightened efficiency.

Every-day infections are, then, among the nation's foes and will be dealt with accordingly. Out of this phase of the preparedness program may come a benefit—perhaps the only one—from the present world holocaust. Success in this salient would mean less human suffering, longer life. Financially, if the habits learned in this campaign are not forgotten, the \$10,000,000,000 bill which society and industry pay each year for accidents, occupational diseases, sickness and postponable deaths should be greatly reduced.

The fact that this campaign is directed almost entirely at germs is an indirect accolade to industry. In the last World War, industrial accidents constituted the chief handicap to production. But so successfully has industry attacked this problem that today industrial accidents account for only five per cent of the total time lost by American

Every morning, each worker gets a vitamin capsule and a health message in the interests of greater production



EDWARD F. WALTON

Full speed production depends upon the stamina and energy of America's workers. Industry finds good health pays



workers. Although careless living habits are less easily controlled than careless working habits, industry has already demonstrated that it can do an effective job in this field, even in such a personal matter as seeing that employees have a properly balanced diet.

Using pills to make stoves

THIS is important because scientists believe many common sicknesses result from lack of proper food.

That is why, at a recent Washington conference, agricultural scientists, medical and nutrition consultants, seriously considered a suggestion to ration *ersatz* or concentrated vitamins among improperly nourished workers. As the discussion proceeded, Dr. Russell M. Wilder, of the Mayo Clinic and member of the National Research Council, observed.

"Concentrated vitamins *could* be supplied in capsule form. That would mean, however, that we would bump into the widespread prejudice against anything that reminds the taker of a pill."

But even as Dr. Wilder was talking, workers in at least two important in-

dustrial plants were taking vitamin capsules—and liking them.

For three years, at a Westinghouse plant in Mansfield, Ohio, where stoves are manufactured, a selected group of workers have been successfully "sold" on vitamins.

Here is the story. Its beginning has nothing to do with defense plans, but its conclusion is decidedly pertinent. At Mansfield, workers are called upon to match different shades of white porcelain, which is used to finish the ranges. Differences in shadings are slight, Westinghouse lighting engineers developed a system of indirect lighting which reduced rejects from an average of more than three per cent to an average of 1.7.

But Ralph F. Bisbee, supervisor of quality control, was still dissatisfied. He began to investigate "the personal equation." At his instigation, the company physician launched a prolonged series of consultations with oculists and medical scientists, including Harold Jeghers, M.D., of Boston, authority on Vitamin A therapy. The present plan grew out of this research.

Workers were first questioned re-

garding their regular daily diets. Then an instrument, called the Bio-photometer was used. It measures the rate of regeneration of visual purple in the eye, to determine Vitamin A deficiency. Workers who obtained sufficient Vitamin A through natural sources were exempted from the program. Lists of foods with high Vitamin A content were given to workers, and many discovered that, by including these foods in their diets, no Vitamin A therapy was necessary. To those who were proven to be deficient in this vitamin, and who disliked foods in which Vitamin A is abundant, a daily dose of 30,000 units (U.S.P.) per person was administered. Tests on the Bio-photometer have been given every two weeks, to check progress.

Better food replaces specs

AS A result 40 per cent of the color-matchers who had been deficient were brought up to optimum level. Some found their sight so improved that they were able to discard glasses they'd worn for years. One who had suffered headaches, burning and smarting eyes after a day's work was not only relieved of these symptoms, but gained eight pounds in weight.

The average number of rejects decreased to three-tenths per cent.

By minimizing the number of alterations, required when parts were mismatched, the program saved the company \$5,000 a year.

"This and other economies," Bisbee recently reported, "have enabled us to reduce the consumer cost of electric ranges from \$208 in 1932 to \$99.50 for a comparable model in 1940."

At Minneapolis, Leighton Wilkie, president of Continental Machines, Inc., has also been serving vitamins to his employees.

One day last fall Wilkie contemplated his growing sheaf of orders for machine tools. He knew that, with the coming of Minnesota's long, severe winters, production would inevitably be disrupted by colds. From his own personal experience, Wilkie knew that vitamins would build up resistance. He thereupon decided upon a "health conservation" program for his plant.

Now every morning at 10:30 in a ten-minute rest period, each worker in the plant receives a paper cup containing one capsule. The capsule provides a concentrated dose of Vitamins A, B, D, and G. Workers fill the cups with water and gulp down the capsules. The paper cups are used partly because instructions can be printed on them, partly as an added precaution against disease.

Now, what about Doctor Wilder's objection that employees would be opposed to pills?

The answer is that Wilkie utilized his knowledge of salesmanship to "sell"

vitamins to his workers. Let's see how he's done it.

First of all, he had a bulletin written by the company doctor, explaining the virtues of keeping fit and the important functions of vitamins, placed in every employee's pay envelope.

Next, a large quantity of flat, folding paper cups was ordered. Printed on each cup was the explanation: "This contains one capsule which may be taken internally to add essential vitamins to the diet." But Wilkie's neatest stroke of persuasion was the assembling of a series of short, snappy paragraphs, entitled "Your Health." One of these is printed on each cup.

The first morning the capsules were distributed, a second bulletin written by the company doctor was given to each worker. Thereafter, promptly at 10:30 a.m., each worker received his vitamin ration. Every morning he found a different health "slogan" printed on his cup. Some follow:

The mouth and throat are the real storehouses for germs.

Bad cases of pimples are not always due to skin trouble. They are more often caused by eating too much pastry and greasy foods.

The difference between natural and emotional fatigue is that a good night's sleep will take care of the former.

Vitamins are the "ounce of prevention" to prevent a pound of colds and infection.

Pills pay for themselves

WILKIE estimates that the project, including the paper cups, printing bills, and vitamin capsules, will cost about \$500 for a three-month period. He expects the program to pay for itself several times over through greater productivity, increased alertness and fewer absences due to sickness.

In the sports field, too, vitamins have been called into use. Last season one middle western basketball coach who found himself with only five players of first string caliber, used vitamins to keep them in condition and build up endurance. He had a successful season. This year the St. Louis Cardinals have caused something of a stir in the baseball world by including vitamins in training camp diet.

These are not isolated instances. A survey by the National Association of Manufacturers shows that in the past 12 months the industries questioned have, of their own volition, spent \$23,000,000 on health programs. They have instituted more than 2,000 special improvements for the control of fatigue and for the promotion of good employee health. Occupational diseases and injuries in these plants have been reduced 47 per cent, and the number of absences lowered 25 per cent.

All the manufacturers questioned agreed that "expenditures for medical supervision are financially profitable." A typical company, employing 500

workers which spent \$6,730 on health improvements last year saved \$12,341, or a net saving of \$5,611. Employees received \$8,228 more in wages because of fewer absences.

Meanwhile the National Research Council is cooperating with Mr. McNutt's organization in the general health program. Two committees are assembling information on nutrition and American food habits. A third, headed by Dr. M. L. Wilson, of the Department of Agriculture, is sifting all material on food which government agencies have accumulated. This information will be put before the American housewife by means of radio, the press, food retail and distributing groups.

In addition to education, the plans include an expansion of all programs whereby milk and food surpluses are distributed to low income groups. Free lunches, made up in whole or in part of vitamin-rich foods, will eventually, it is hoped, be made available to 9,000,000 school children.

Food manufacturers will be asked to cooperate. The action of the flour industry in fortifying the flour that makes our bread with Vitamin B, will be held out as a shining example. Sugar

ly high vitamin content is boosted. This peanut butter is now being fed to drafted men in the Army during their first few months of service.

This general program is expected to give further help to the workman who, it is envisaged, will find more nutritious foods both at home and in his dinner pail. But the prolonged cooperation of industry and science, which has already reduced industrial hazards, is expected to affect him even more.

Responsibility for that part of the government health program which pertains to industry is vested, principally, in the industrial medicine subcommittee of the Council of National Defense. The Industrial Hygiene Division of the United States Public Health Service which has already developed a "plan for the conservation of manpower in our defense industries" will cooperate.

Since the needs of employees are known, the direction of the attack against present health handicaps in industry is fairly evident. First, according to Sanitary Engineer J. J. Bloomfield and Surgeon Paul A. Neal, of the Industrial Hygiene Division, attention must be given to the hygiene of the individual, and, second, to his environment. The first function lies within the



Working only through improved diet for workers, the company reduced rejects to three-tenths per cent which meant saving \$5,000 annually

manufacturers, it's rumored, will be requested to restore the riboflavin, or Vitamin G, to sugar depleted of its natural supply by too much refining. Similar attention will be directed at makers of oleomargarine and other fats. Those companies already fortifying their foods with vitamins will be encouraged. Anheuser-Busch, for example, will soon distribute commercially a peanut butter in which the natural-

province of the physician, the second of the engineer. Recently the American Medical Association appointed a Committee on Medical Preparedness to encourage the training of more industrial doctors and hygienists.

If, out of all this, comes a healthier nation, future generations may look back gratefully on these troubled times—it's an ill wind that blows nobody good.

Travel Also Broadens Social

By THOMAS J. WOOFER

MAURY'S study of ocean currents increased safety on the Seven Seas. A similar study of land migration may change labor laws, farm relief and economic experiment

WHEN the United States definitely turned her back on her traditional role as the world's Melting Pot, we believed we were solving, once and for all, our immigration problem. Now it turns out, we did nothing of the kind.

True, we are no longer absorbing millions of immigrants, but migration within the country has been going on in a whirlpool of movement. Automobiles, grapefruit, better soil, better climate, all have acted as giant magnets pulling people out of their homes, their states, their neighborhoods and caus-

ing dislocations which have played unheralded but important parts in bank failures, labor laws, farm relief. They have also added considerably to our quota of social experiments and reform.

Probably nobody can escape the effects of this American tendency not to stay put; but fortunately there is a pattern to the picture. That is, our popula-

tion shifts are not caused by masses of people rushing about, now here, now there according to whims or perversity. There are, of course, numerous short range, random movements but, for the most part, this stream has a persistent current and follows definite routes. Men who depend on others, either as customers or as workers, need to know what these routes are if they are to plan their futures with any certainty.

Over the past few decades these routes have led principally from East to West, from South to North, and from farm to factory. They were busiest in the 1920's when we had probably the greatest milling about of population that any nation has ever experienced.

Fleeing from dust, crop failure, grasshoppers, the prototypes of the "Grapes of Wrath" flocked to the Southwest



Issues

Although the frontier with its free land had closed, the West was still filling up and the 1920 California gold rush netted 1,250,000 migrants. The Southeast was exporting 250,000 persons a year to the Northeast and Midwest, and the farms of the nation as a whole were exporting about 600,000 a year to the factories.

One of the main drives back of this restlessness has been the unequal birth rate in different regions. The proportion of children in farm families is more than a third larger than in city families. In the Appalachian mountain farm families, the proportion is half again as great as in the more prosperous areas around the Great Lakes, and the poorer cabins in the Cotton Belt house

Bumming rides was no novelty even in good times, but it aroused a national hubbub during the depression



EWING GALLOWAY



This young hitchhiker demonstrates the technique that won free rides from Louisiana to Seattle

one-third more children than the more prosperous Iowa Corn Belt homes.

As a result, in these poorer areas there is an annual crop of new and hopeful workers who are compelled to leave their home community to find work. The birth rate in the cities is already so low that, if they did not receive constant reinforcements from the farm, population would shrink.

On the other hand the birth rate in several hundred of the poorer farming counties is so high that, with no outward movement, they would double in population in

30 years. In the past, movement out of these disadvantaged areas has been of great importance in adjusting population to resources. The movement from 1930 to 1940 was not nearly so large in volume as it had been in previous decades; neither were the moves from such long distances. In fact, the lack of movement out of areas of stagnant opportunity contributed heavily to the problems of unemployment.

Considering the Mississippi River as a boundary between East and West, there was little net movement from one section to another. Similarly, across the Ohio River which separates North and South, the net movement was small.

Thus the significant movements were within each of these regions—from farm to city in all of them and from the Plains to the Pacific States within the West.

When drought distress devastated the Great Plains, many ruined farmers sought the end of the rainbow in California. Fleeing from dust, crop failure, grasshoppers, an estimated 350,000 migratory farm laborers went to the Southwest. Their presence does not, however, register fully in the Census since their influx was partly offset by the return of Mexicans to their native land. Even so, California's resident population increased 1,200,000.

The migrants from the northern drought states went for the most part to Oregon and Washington where the availability of land enabled many of them to adjust more successfully than those in the Southwest. From 1930 to 1940 some 200,000 moved into the Pacific Northwest. When it was generally thought the frontier had vanished, settlers continued to find new locations in these western valleys.

Movement to the Pacific States, instead of originating in all parts of the country as in the past, came largely from the nine states most heavily affected by recurrent droughts—Arkansas, Oklahoma, Iowa, Missouri, Kansas, Nebraska, Montana, and North and South Dakota. These showed losses by emigration of more than 1,250,000, or one-eighth of their 1930 rural population.

Magnets draw rural labor

WHEN the westward migration began to fall off, the demand for industrial labor increased. No longer was the annual influx of aliens large enough to keep the factory wheels turning and the native born rural labor supply was increasingly drawn upon. Industrial centers of the Northeast and Midwest were the magnets for this movement. It was especially heavy from 1920 to 1930. In that decade the cities absorbed five-sixths of the increase of the nation and the remaining sixth went to villages and suburban communities.

Farms not only lost all of their excess of births over deaths but suffered a further loss of 1,000,000 from their 1930 population indicating a net migration to cities and villages of 6,000,000. The large Negro colonies of the metropolises were heavily augmented, contingents of Kentucky and Tennessee mountaineers appeared in the Midwest and boys and girls from the Southeast flocked to New York and Pennsylvania.

This movement was highly concentrated. Already a number of the smaller cities had ceased to attract migrants. Almost the whole gain by migration was in large metropolitan centers. A fourth of the youth coming to seek their fortune in cities went to the four centers of New York, Detroit, Chicago, and Los Angeles. Perhaps this over-centralization of brains and skill had much to do with aggravating the depression.

The industrial depression, however, acted as a powerful brake on normal movement. Instead of an average movement from farms of 600,000 a year as in the 1920's there was an average of only about 250,000 and in one year, 1932, there was an actual net back to the farm movement. Instead of losing all of their natural increase and 1,000,000 additional as in the 1920's, the farms,

(Continued on page 114)



Auto clinics traveled through the agricultural districts of California, immunizing the nomad families against epidemic diseases

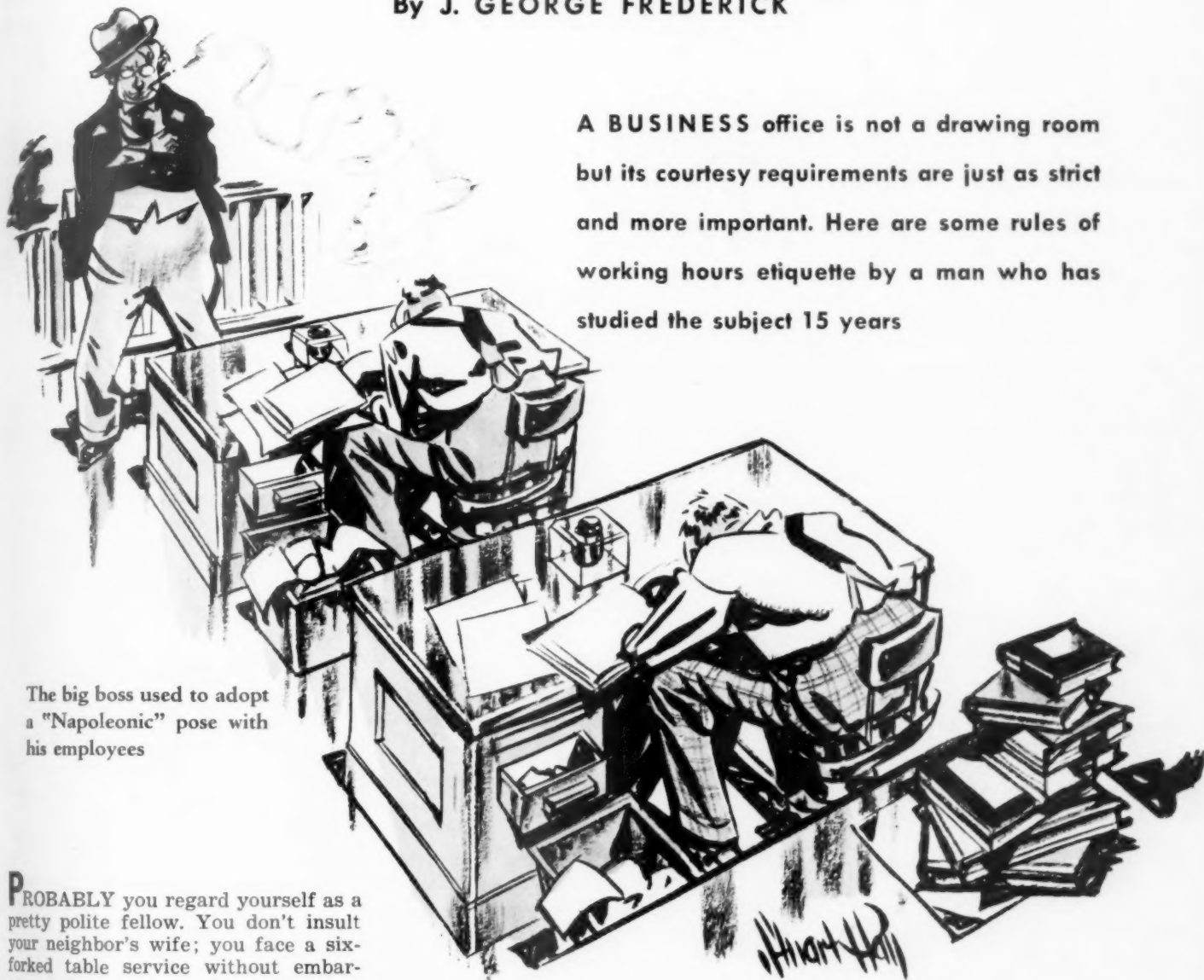


Large Negro colonies in the cities were heavily augmented by migrants, many of whom never passed beyond the third or fourth grade in school

Your Secretary is a Lady

By J. GEORGE FREDERICK

A BUSINESS office is not a drawing room but its courtesy requirements are just as strict and more important. Here are some rules of working hours etiquette by a man who has studied the subject 15 years



The big boss used to adopt a "Napoleonic" pose with his employees

PROBABLY you regard yourself as a pretty polite fellow. You don't insult your neighbor's wife; you face a six-forked table service without embarrassment; you are a thoughtful host and an agreeable guest. Socially you know how to conduct yourself with courtesy and assurance. But, do you know how to reprimand your secretary when she makes a mistake? Some day there will be an etiquette guide for business. It will deal with things which we are beginning to realize are very important. It will be the genuine lubricating oil of human relationships and organization efficiency.

Defense needs spur this hope

THE management engineers—those patient, earnest souls who try to make people cooperate reasonably—tell us that strictly mechanical progress is not genuine progress. They hope now to take our minds off of our "magnificent mechanical and inventive progress" so that we can focus on the far more im-

portant problem of human relations.

Now, when you put this subject on the back of the stove and let it simmer for a time, it cooks down largely into a matter of business etiquette: the manners, the attitudes of people who work together. No wonder a Chicago professor a few years ago startled simple folk by saying that manners were even more important than morals, because they were morals in action. He clinched his remarks by saying that we could probably cut automobile accidents in half if only the manners of auto drivers could be raised to par.

Frankly, the rise of business (even its morals) definitely has coincided in the past with rise in business manners. The manners of an Oriental bazaar trader are terrible; if you enter his shop and leave without buying, he is likely as not

to insult you; and his lies about his goods are fantastic. These bazaar traders clutch at your clothes, follow you, shout at you, trick and annoy you. Perpetually irritated by such manners, the ancient Greeks despised all traders, and even the Bible says you can't separate sin from trading. The medieval guilds tried to improve on this, but it was America that took more decisive steps.

A. T. Stewart and John Wanamaker, both religious and high-principled young men, introduced the guarantee and the one-price system, which were really codes of business manners. When the courtly Marshall Field laid down the principle, "the customer is always right," and when Richard Sears (founder of Sears Roebuck & Co.) gallantly gave a new watch to the buyer who had dropped and broken his purchase, there

evolved the inner core of modern business etiquette.

But while business etiquette between business man and customer grew rapidly, because it was profitable, business etiquette between employer and employee and between employee and employee, did not grow so rapidly. The big boss often observed a "Napoleonic" standard of etiquette. Napoleon tweaked the ears of his aides, right before the whole army, to "show them who was master."

Executives "grow up"

IT was Andrew Carnegie who introduced business manners toward the assistant executive staff. He did it by deflating the idea that the boss was all-knowing and all-powerful and that all decisions must be made by him out of his infinite wisdom. Carnegie delegated authority and responsibility on a co-equal basis to his famous aides. These aides could make big decisions all by themselves, and did not need to run like little boys to the boss for approval. They could even oppose Carnegie if they wished; he would hold them responsible for results, but give them their heads as to how they got the results. This was truly revolutionary in business organization etiquette; the beginning of the functional line-and-staff organization principle (which even in military affairs has superseded the Napoleonic principle).

But still this business etiquette didn't touch employees; only executives.

Judge Elbert H. Gary (about 1904), as head of the U. S. Steel Corporation, took the next big step. He introduced on a large scale great advances in humanitarian employee welfare, safety, profit-sharing, courtesy. Old Charles R. Flint gave a dinner party to which he invited Samuel Gompers of organized labor, and capitalists, to sit down at the table together as a symbol of the new manners toward employees.

The engineers then took over. Scientific management found it could not have efficiency with the old attitude. It needed the cooperation of highly skilled equals, rid of all inhibiting psychology, with a clearly defined line-and-staff functional organization.

Scientific modern organization starts off with the idea that no one man knows enough to make all decisions, not even the big boss. The important thing is to make researches and use fact instead of opinion. The big boss is only an executive coordinator of many experts and

lesser executives, who relies on them to know and find out the facts, and to act within the limited sphere of their authority.

The modern boss is therefore humble. He says frankly that he doesn't know—he has hired you to know and he graciously encourages you to dig for the



The manners of Oriental bazaar traders led to a hatred of all those in business

facts and act as though you were the big boss (within your prescribed field of responsibility). He is courteously delicate about "going over your head"; careful not to lower your morale by unmannerly business etiquette.

Nobody is in a class "above" anybody else. Therefore classless courtesy, horizontal etiquette, uniform good manners are the order of the day in business and industry. The president of the company probably was a worker in overalls not long ago. Large corporations are no longer owned by one big pooh-bah, but by thousands of small stockholders.

Under these changed conditions, codes of business etiquette become basic in importance. Cooperation and unity are the watchwords. The primary stuff of which these are made is attitude and manner.

What are some of the codes by which up-to-date business people govern themselves in their relationships? A lot of it is just in process of formulation, and hasn't yet been fully codified. I have for 15 years been trying to do this,

and can report a good deal of progress. Live business organizations, through conventions of managers, through researches, through inter-visitation and exchange, through books, have developed a body of material which is now the more or less common currency of practice.

Here are some selected items from among a dozen or more lengthy "codes of etiquette" for various business functions:

"The Etiquette of the Job"

1. You do not seek individual advantage, out of line with the advantage of others on a par with you in the organization.
2. You do not adversely criticize anyone in the presence of others.
3. You give due credit, privately and publicly, to any other's good suggestion.
4. To outsiders, you accept blame, in the name of the organization, for the mistakes of individuals in the organization.
5. You do not go over the heads of others in your organization (above or below you), but always meticulously consult and defer to the constituted functional head.
6. If you must radically disagree with an associate, and must actively oppose him, you will go to him first and tell him so, and never work against him by "underground" methods.
7. You do not hide a serious situation from your superiors, on the mistaken notion of shielding someone; nor do you "snitch" on others, in unimportant matters.
8. You do not talk derogatively about your firm to outsiders, or disclose business secrets.
9. You always give your best enthusiasm and loyalty and effort to your job, to the very day you quit, regardless of what the situation is.
10. You try to comprehend the special difficulties and responsibilities of the person who is above you in the organization; you may have his job some day.

"The Etiquette of the Salesman and the Purchasing Agent"

1. The salesman assumes that the purchasing agent is not merely a "buffer" without authority, but is functioning genuinely as purchasing executive, and will be guided solely by the facts and the considerations of business efficiency; also that he cannot or should not be influenced by any personal considerations, feelings, treats, gifts, or secret offers.
2. The purchasing agent assumes that the salesman is offering him terms

no higher than to other comparable firms, that the representations made verbally are honest, sincere and free from falsity or ambiguity, and that his firm will back up every word he says.

3. The salesman and the P. A. regard it as an agreed standard item of etiquette that offers of more than cigars, samples, luncheons or novelties are to be regarded as beyond good business taste. In certain circumstances, dinner and theater are not taboo, but all the direct or indirect offers of valuable presents, money, trips, etc., are distinctly taboo, and will seriously prejudice the relationship.
4. The salesman will regard it as a standard of etiquette to tell of the weakness, if any, of his goods, as well as its strengths, and sincerely aid the customer in choosing the most suitable goods for the purpose intended.
5. The P. A. regards it as the etiquette of his job to acquaint the salesman with all the conditions of an order at the time the quotation is made, and not add others later.
6. The salesman will carefully inform the P. A. at the time of taking the order of all the conditions of acceptance of the order, and not announce them later.

consideration with petty bribery or guile from the customer's employees, reception clerks, private secretaries, etc., in an over zealous desire to get preferred entree or the "inside track."

10. The salesman will not call more often, or stay longer than he and the customer agree is practically useful; and will not "oversolicit" or wear out his welcome.

"The Etiquette of the Executive or Employer"

1. At the first point of contact with the applicant for a position, the employer or executive in charge should take the attitude that it is no more a favor to consider the application than to make it. Careful avoidance of any overbearing attitude is called for—even when the applicant is crude and shows no tact or courtesy. The greater obligation from courtesy rests upon the executive, by all the standard rules of chivalry, etiquette and good business.
2. Advertisements for help should always be as specific as possible, and without ambiguous or misleading terms which attract applicants clearly unsuited to the job, or who would

not be likely to accept the surprise conditions and terms offered.

3. No hiring or firing of employees at strategic periods calculated barely to avoid giving them vacations normally due according to standard rules. The same applies to pensions, bonuses, profit-sharing, etc.
4. Issuing of orders clearly and definitely, with adequate detail, so that an employee may specifically know his responsibility and duty in any given situation or order.
5. Restraint in criticizing or reprimanding employees, accompanied whenever possible by specific advice as to how an error or shortcoming might have been avoided. No outburst of temper and hard language.
6. No worker should be subjected to humiliating reprimands before another worker or the organization as a whole.
7. Executives should never make their employees the victims of "lightning rods" for their own hot tempers, irritability, neurotic habits or irascible personalities.
8. There should always be a wide open double-track channel of communication between the worker and the executive.

(Continued on page 91)



No worker should be subjected to humiliating reprimands in the hearing of others

7. The salesman will not go over the head of the P. A. to a man higher up unless he fails to be accorded due courtesy and facilities, or unless he is convinced that the real buying executive has not been informed of his goods.
8. The P. A. will not ask the salesman to wangle special considerations or concessions from his firm, or to connive at upsetting his house's policy or rules.
9. The salesman will not seek special



Politicians resisted! Uniformed policemen questioned those who had signed the petition, seeking evidence of fraud

NEW YORK state, in 1934, was ringing with cries for public economy. When hearings on the state budget opened, thousands of citizens jammed the assembly chamber, balconies and corridors in the state house at Albany. They represented groups alarmed by threats to the tax dollar on which they were dependent. The one exception was a committee of 17 men from the taxpayers associations of New York. The economy urge of 1934 produced slight economy.

Now move the scene ahead five years. The setting and the occasion are the same. Cars, trains and busses are bringing thousands to Albany. No budget hearing in New York history has ever drawn such a crowd.

But the taxpayer associations had learned that, for political purposes, nothing is so effective as an organized show of numbers. The budget took a \$25,000,000 cut.

These happenings are recalled, not to pass on the merits of the budget reductions, but as a dramatic dem-

onstration of the citizens' renewed interest in government.

The phenomenon has taken many forms. Dallas entertains a three-day Citizens Council, attended by more than 1,000 Texans and addressed to the bettering of local government. . . . The National Federation of Business and Professional Women organizes "Schools for Voters" over the country. . . . In Chicago, citizen volunteers mark examination papers of 7,000 candidates for truant officer jobs. . . . In a single winter, more than 22,000 persons turn out for Minneapolis Town Hall meetings to discuss local problems. . . . Half the population of Montebello, Calif., attends a municipal open house to learn more about town affairs. . . . The city-manager system continues to spread. . . . Scores of citizen-sponsored research bureaus spend \$500,000 annually digging into local government operations for facts that may serve as a basis for action. . . . The University of Denver, backed by the Alfred P. Sloan Foundation, establishes a graduate department

How Much

to prepare young men for careers in the critical analysis of local government operations from the outside.

University and Foundation regard these citizen groups as a fourth estate for government, supplementing the orthodox executive, legislative and judicial departments. In their view, such groups are here to stay. They will have trained staffs and they will be geared in as a fixed and accepted part of the machinery of democracy.

Painful facts of government

APPEALS to civic virtue never have done very much to rouse interest in government. Some sort of pain seems necessary. In the past ten years, Americans have been learning from a growing ache in the pocketbook that local government is big business and that they are paying for it, waste, spoils and inefficiency included. There are about 175,000 governmental units in the United States—one for each 800 inhabitants! Ninety per cent of them are local.

Expenditures by the nation's 3,000 counties, increased from state and federal grants, have more than doubled since 1930. Schools alone account for a fourth of all public employees. Fifty per cent of the remaining civil servants work for states, municipalities and counties. To these hordes, the people have delegated or have lost by default many of the prerogatives of self-government. Now they intend to retrieve them!

The movement may start, as it did three years ago in Newark, in little parlor groups expanded until they were using church, club and school halls. They combined, organized as a Citizens Union and recruited thousands of members at 25 cents a head. Persistent doorbell ringing put 25,000 names on a petition to discard the commission government for a council-manager system. Politicians resisted. The city clerk refused to issue a receipt for the petition until the Union threatened court action. Then the authenticity of the signatures was challenged. Twenty-five thousand letters were dispatched; uniformed policemen and other city employees questioned the petitioners on their doorsteps.

Unable to intimidate the Union or

Do You Want Good Government?

By FARNSWORTH CROWDER

CITIZENS who want it badly enough are getting it, sometimes in spite of, sometimes with the help of, politicians. If

things aren't going so well in your town, somebody must be to blame for conditions—maybe it's you



A growing ache in the pocketbook shows that local government is a big and costly business

to prove irregularities, officials simply forgot to call the election. The Citizens Union went to court. At last the State Supreme Court decided that the clerk must call an election. Moving cleverly fast, he called it for two weeks hence. Thousands—the Union claimed—were thereby disenfranchised and too little time remained for a fair campaign. Politicians rallied round, however, and the plan was rejected.

The question now is—will the Newark reform movement show the usual liability of such movements to early death, whether after a set-back or a victory? It was one thing for the famous Charter League to remake Cincinnati

government on the city-manager pattern: what has really counted has been the League's day-to-day vigilance in seeing that the citizens' employees carry out the citizens' intentions.

Corruption grows like a jungle

THE spectacular city corruption of the '90's brought on a National Conference for Good Government. To be remembered now is that, out of that reaction sprang a permanent vigilance institution, the National Municipal League, which has been remaking municipal machinery ever since:

Leading experiments in commission

and city-manager forms, plugging for the short ballot and proportional representation, introducing efficiency techniques in budgeting, accounting, centralized purchasing and the like.

The League has long known that ground gained must be held, otherwise, the old abuses, like jungle growth, creep back as rank as ever.

Newark and similar cities could be encouraged by the history of New York City's Citizens Union. In existence since 1879, when Greater New York itself came into being, it has kept pounding away, closing in. It would take a long article to catalog its activities.

Supported today by 5,000 contrib-

utors, the Union employs a small staff which works under orders from citizen committees—volunteer committees with waiting lists!

It was also in New York, in 1906, that another type of agency, the research bureau, got its start. Today, about 100 cities and states have citizen-backed fact-finding instruments. Without much acclaim, often half-starved for funds and woefully shy on publicity, they have been pounding away at waste and inefficiency.

Obviously, citizen participation in government is not new but only of late has the growth become wide and plainly visible. It has spread from the big cities to smaller municipalities and towns, down even to the dark continent of American government, the county and its subdivisions.

The total of fourth-estate groups is almost too variegated simply to classify, but they all swing on the proposition that government, being citizen business, should have citizen attention.

Kenosha, Wis., has a citizen body known as the Civic Council. It is made up of two delegates each from 74 member organizations, the service clubs, the fraternal bodies, the Manufacturers Association, 14 labor unions, the P.T.A., the Dental Society and the Bar Association. The 148 delegates meet regularly to thrash over community problems. Probably the Council's most valuable function has been to give Kenosha officials accurate views of public sentiment. It has developed the practice of working with the city fathers to such a point as to be, in effect, a branch of the city govern-

ment. Through it, officialdom is informed of popular wishes on countless matters and is prodded into action—establishing a branch library, combating discriminatory freight rates on coal shipments, investigating utility rates, protecting pedestrians from stray dogs, eliminating traffic hazards, extending the civil service, bettering relations with rural neighbors.

When Kenosha, on the basis of a complex set of standards, is given an award as the Number One city in Wisconsin, the Civic Council is entitled to blush with pride.

A good fight gets results

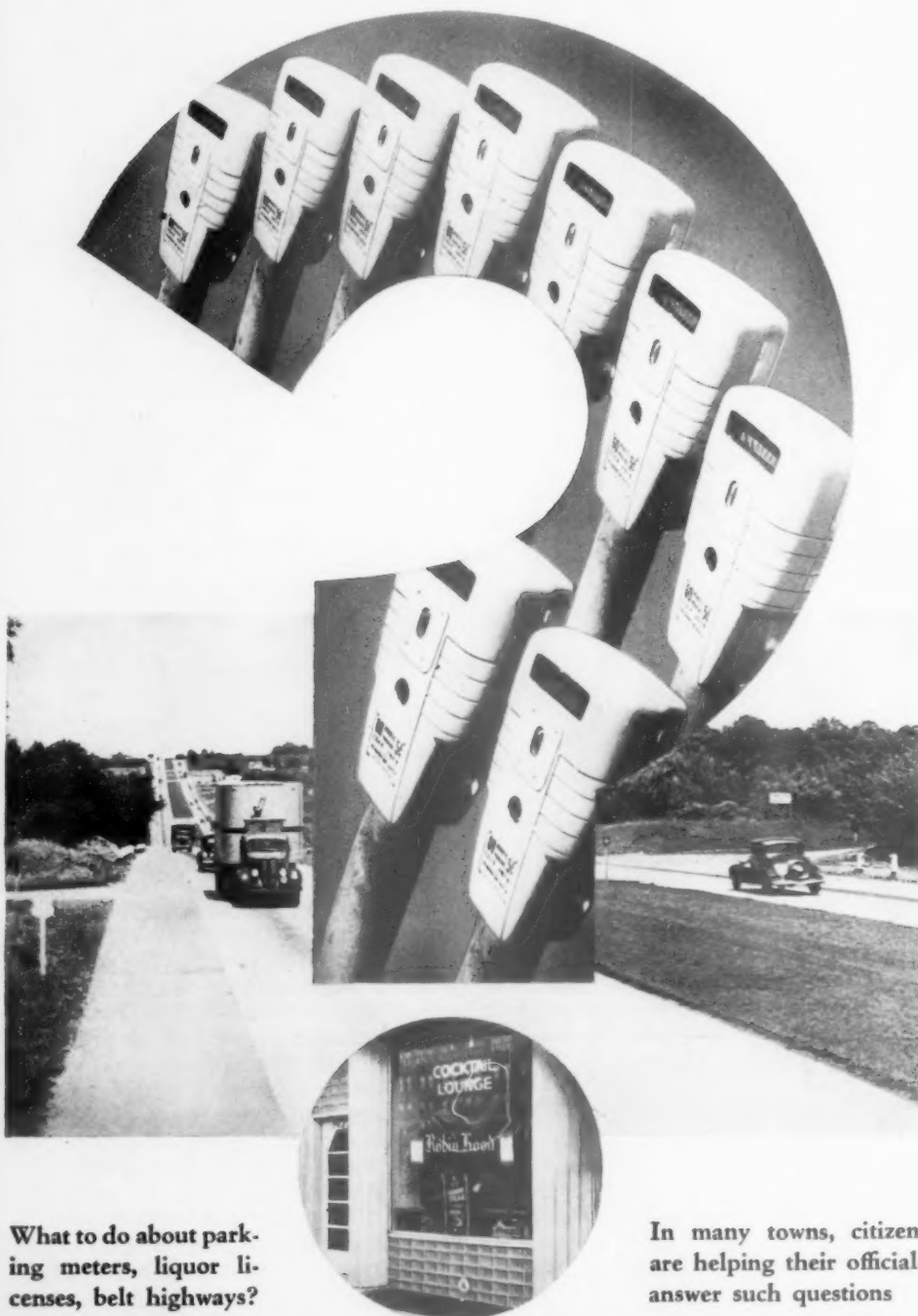
SIMILARLY, when the Census Bureau credits South Bend, Ind., with having the lowest *per capita* government cost of any northern city in its class, that town's Civic Planning Association, with its 1,700 citizen members, rises to take a bow. Ten years back, a committee of South Bend business men visited the Board of County Commissioners to protest a big bond issue. Ignored, they formed the Civic Association. The next protest against a bond issue was effective.

Encouraged, the Association turned to the local relief situation to find the township trustee swamped with duties. Members worked as volunteers in his office until a professional welfare staff could be established. At the insistence of the Association, a real estate revaluation was made on a scientific basis, so successful that the State Board of Tax Commissioners is now working to have the technique adopted throughout Indiana.

The Association as now constituted is about equally divided between Democrats and Republicans, has 350 women members, has a large representation from among the foreign born (one of its leaders from the first has been a Polish priest) and classifies a third of its rolls as factory workers and labor unionists. The Association has its own club house for business, educational and social functions. Policies, as determined by the membership as a whole, are put in operation by directors and executive officers. Last fall, town and county budgets for 1940 were reduced more than 15 per cent by reviewing bodies after citizen hearings and appeals.

Worth noticing is that these Kenosha and South Bend agencies have a broad democratic membership base. American communities are haunted by the ghosts of small tight committees that set out to do big things for the public weal but made the mistake of remaining small and exclusive and therefore rousing the suspicion that they are selfish pressure groups with axes to grind. Not only officials, but voters too.

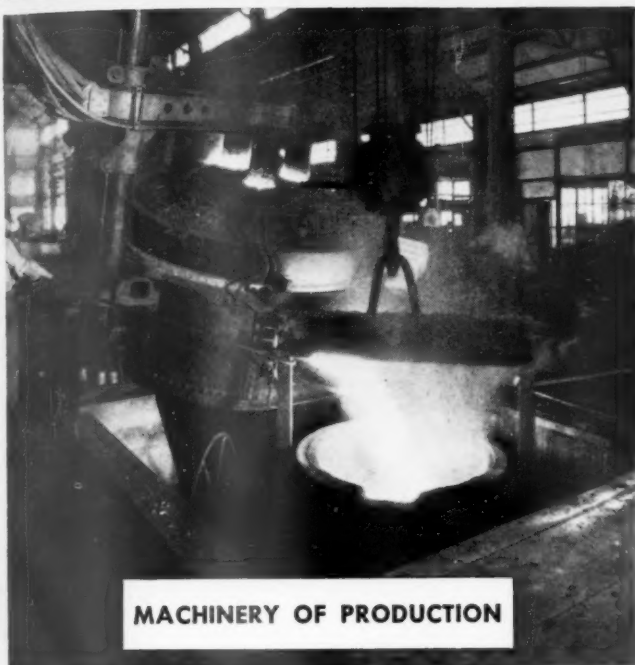
(Continued on page 86)



What to do about parking meters, liquor licenses, belt highways?

In many towns, citizens are helping their officials answer such questions

VITAL TO TODAY'S PRODUCTION



MACHINERY OF PRODUCTION



MACHINERY OF CONTROL

As essential as the machinery in the factory is the machinery in the office which provides executives with vital control figures, such as—

BUDGETS—Estimates, specifications and commitments that precede actual factory production.

PURCHASING—Purchase orders and vendors' records that speed delivery of parts and materials—prevent misunderstandings.

MATERIAL CONTROL—Requisitions, receiving records, stock records that control the flow of materials to scheduled rate of output—furnish up-to-the-minute statistics and reports.

LABOR ACCOUNTING—Earnings calculations, wage accruals, payroll records that insure prompt payment of personnel—provide adequate statistics and reports.

COST RECORDS—Cost-to-date figures—available *every day*—that provide expense and production controls and statistics for review.

MANAGEMENT FIGURES—Vital figure-facts, statistics and reports that permit quick decisions, quick action.

Today modern Burroughs machines provide every type of required record and figure control in less time, with less effort, at less cost. Investigate—telephone the local Burroughs office today.

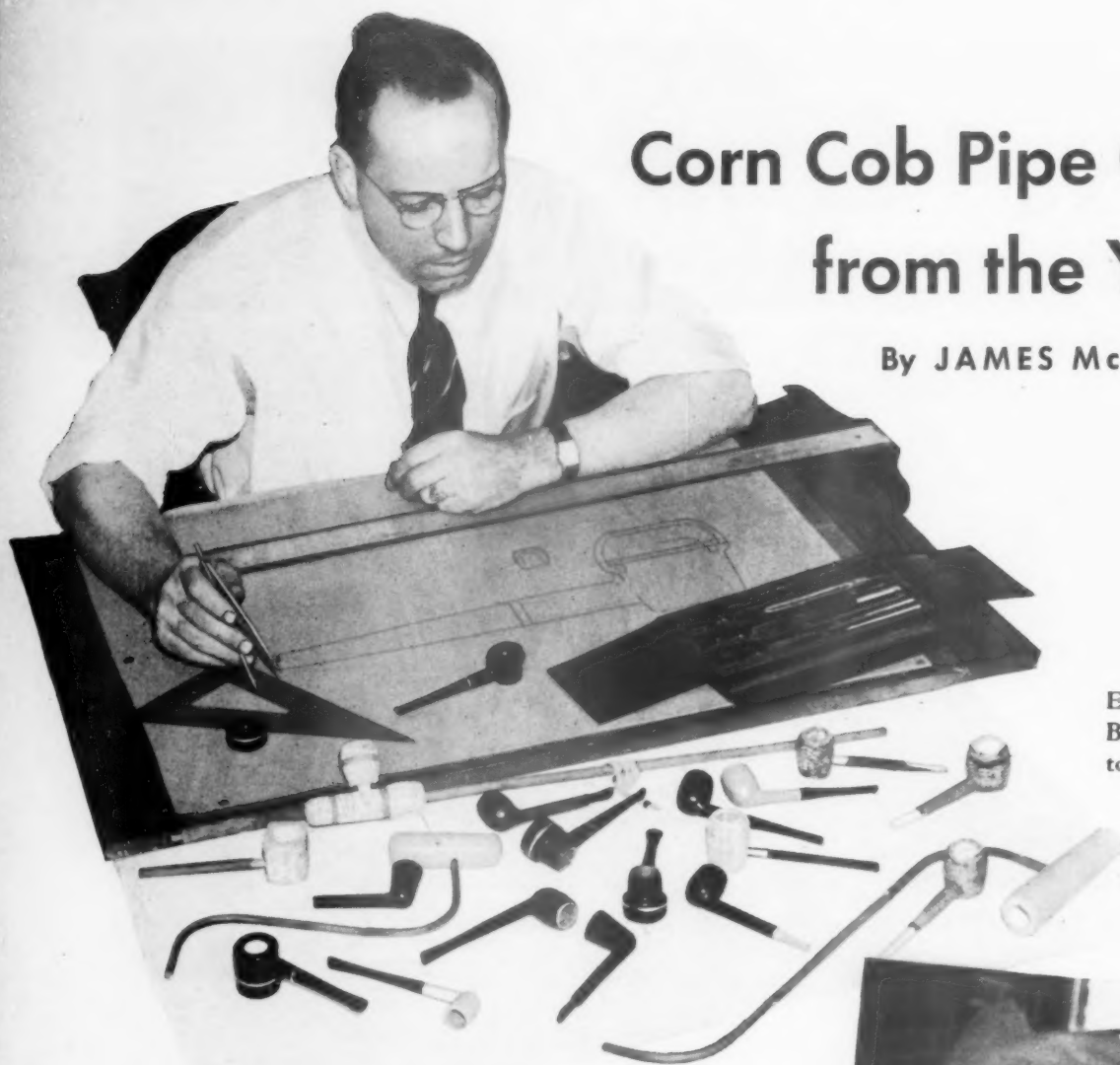
BURROUGHS ADDING MACHINE COMPANY • DETROIT, MICHIGAN

Today's Burroughs

DOES THE WORK IN LESS TIME—WITH LESS EFFORT—AT LESS COST

Corn Cob Pipe Graduates from the Yokel Class

By JAMES McQUEENY



E. J. Steuterman designs Bakelite-coated corn cobs to look like briars

THE COB PIPE has long been a sure-fire prop to indicate simple living. Even Congressmen use it to represent honesty

THE last bulky sack was thrown on the truck and John Kraft sat down on the running board to do some figuring.

Let's see, his seed cost him \$2.00 a bushel and planted on the basis of one to each eight acres, had yielded 65 bushels to the acre. That meant a gross return of \$15 an acre, which wasn't bad, considering he still had all his corn! And whenever he got around to selling it, he felt sure the hominy people would be willing to pay him a premium.

Sounds like agricultural wizardry, doesn't it? But it isn't, because out of John Kraft's 80 acres of rich, Missouri River bottom-lands comes the raw material for making thousands of corn cob pipes. And, as is true of scores of other Central Missouri farmers, John Kraft sells his cobs first, then the corn, thus finding a lucrative market for a product which is almost a total waste on most farms.

The cob pipe belongs to that select little group of favorites, the apple pie, blue serge suits, Currier & Ives prints, Johann Strauss' waltzes, and the circus whose popularity never seems to diminish. The pipe-makers say their product leads a double life—for every one that's smoked in public five are tucked away in office drawers, by easy chairs in dens, and on window sills above basement work benches.

The South African Kaffir, the gaucho of the Argentine,



Choice cobs bring about one-half cent apiece and farmer gets added profit by selling the corn for hominy



MANHATTAN SUNSET

ROY PINNEY

Who said the sun is coming up again?

WATCHING THE SUN SET, the proverbial man from Missouri wouldn't believe it was coming up again... until he saw it do so with his own eyes.

And when Metropolitan invests money for the benefit of policyholders, it adopts that sound old habit of taking nothing for granted. Like the man from Missouri, we want to be shown.

► And that's because our first consideration must be safety. Of course, there is no such thing as an absolutely riskless investment, but we like to be as certain as possible that each investment is a good one. Our staff of investment specialists is better equipped than any individual to investigate proposed investments and therefore should make fewer mistakes.

Of course, all Metropolitan investments are made in accordance with the insurance laws, which wisely limit the fields in which life insurance companies may invest. In addition, all such investments must meet our own investment standards.

► Suppose, for example, that Metropolitan is considering investing a sum

of money in the bonds of an industrial company, or a company distributing light, heat, or power. The first thing we do is to gather all available data about that concern... its financial statements, recent audits, and similar material.

► In many instances, it is necessary to go further... to make a more exhaustive study of the company's management, its position in the trade, its record, and its prospects.

The mass of first-hand, up-to-date information thus obtained is carefully considered by those charged with this responsibility. The recommendations of these men must then be approved by the Finance Committee of Metropolitan's Board of Directors.

Once the securities have been purchased, Metropolitan continues to follow the operations, through annual or interim reports, and to watch trade developments and changes in the industry in which the borrower is engaged. Metropolitan is better able to watch these things than an individual could be, and is better prepared to handle any difficulties that may arise.

► As we said before, safety is the first consideration in all Metropolitan investments. Second to safety, is the income from the investment—the interest that helps pay the cost of your life insurance.

The care with which Metropolitan invests funds for the benefit of its policyholders is reflected in the sound assets which enable the Company to fulfill its obligations.

COPYRIGHT 1941
—METROPOLITAN LIFE INSURANCE CO.

This is Number 36 in a series of advertisements designed to give the public a clearer understanding of how a life insurance company operates. Copies of preceding advertisements in this series will be mailed upon request.

Metropolitan Life Insurance Company (A MUTUAL COMPANY)

Frederick H. Ecker,
CHAIRMAN OF THE BOARD

Leroy A. Lincoln,
PRESIDENT

1 MADISON AVENUE, NEW YORK, N. Y.



the Calcutta dock worker—they're all acquainted with the cob pipe and, despite depressions and droughts, wars and plagues, more than 30,000,000 are sold all over the world yearly. To meet this demand, approximately 20,000 acres of special corn are grown in Missouri for the four factories which control a world market and are within a few hours' driving distance of one another.

If you tried to bore a hole in an ordinary cob it would fly to pieces, hence the need for special ones grown from Collier seed, a cross of native Indian and Boone County white corn, which thrives in the river bottom lands.

Use only the large cobs

E. H. OTTO, president of a large cob factory at Washington, Mo., gave me an insight into this topsy-turvy bit of farming. In the early spring, he pointed out, his organization supplies seed for a farmer with a patch of ground suitable for growing the hardy, late maturing strain at \$2.00 a bushel, though no payment is made until the crop is harvested and the cobs tabulated. All cobs measuring one and three-quarters inches or more in diameter are bought from the grower at a fixed price, usually around a half cent each, though in poor crop years it jumps to a cent and a half per cob.

The larger the cob, the more woody the fiber, an all important factor in making quality pipes. Unusually large cobs bring a premium, the largest one ever offered a pipe maker being almost

13 inches long, approximately six and a half inches in diameter, and weighing a full pound.

On a normal yield, a farmer realizes \$10 to \$15 an acre on his cobs but in banner years the return may scale up to \$20. There's no extra expense involved, the company delivers the seed to his door-step and, when his crop is gathered and shelled, a truck stops by to pick up the cobs. The turnover among cob producers is small and, in his ledger, Mr. Otto showed us the names of several farmers with whom he had been doing business 40 and 50 years.

It's not unusual for the factory to have between \$50,000 and \$60,000 tied

up in cobs during a single season. Once the cobs are deposited at the factory they must be seasoned for a year or two so they'll absorb the nicotine satisfactorily; the early winter months often find more than 1,000,000 cobs in the freely vented storage bins adjoining a factory.

Making a cob pipe is exacting work and, without mass production methods, their price would be prohibitive.

Depending on the style of the model, between 13 and 17 hand operations are involved. As soon as the nubbins have been culled and burned from a seasoned batch, a sawer rips the remainder into

(Continued on page 91)



There are between 13 and 17 hand operations. These cobs are getting a coat of shellac



Medium-sized five-cent cob pipes have been gaining sales momentum



Seasoned cobs are tough but power saw rips them into proper lengths

The Case for Construction



DOUGLAS FROM GENDREAU

AN EXAMINATION of the reasons for the growth of the American construction industry together with an interpretation of relevant developments now shaping in the field of public policy

In Praise of Builders

THE NATION'S current concern with defense has focused public interest on the role of the construction industry—a loosely integrated group of related practitioners that includes architects, engineers, builders, developers, financial institutions, sellers and promoters, producers and suppliers of materials. A representative catalogue of products of the industry would list the single family dwelling of John Jones, mechanic, and the 85-story Empire State building; the highway bridge across Goose Creek and the mile-plus span that arches the Golden Gate; the auditorium in Everyburg and the New York World's Fair; the concrete strip on the east side of the public square in Hometown and Pennsylvania's super straight-line, six-lane 160-mile overland ribbon between Harrisburg and Pittsburgh; structures big and little as various as man's requirements for places in which to live and work.

With a citizen army in the millions now booked for training, the problem of barrack space becomes immediately acute. Urgent need for industrial plant expansion in the cause of preparedness presents its own exactions. How well the construction industry will do its part in the defense job can be confidently anticipated by appraisal of its resourcefulness in fulfilling the country's peacetime requirements.

Provision of suitable and adequate shelter for the United States' 35,000,000 families has been accepted as the paramount, permanent task of this industry. In the early days of the depression, home building dropped to well under 100,000 units a year as compared to nearly 700,000 a year during the 1920's. But last year more than 550,000 homes were built and 1941 promises to break that record.

The industry is well on the way toward

meeting the challenge of critics who assert that it is incapable of providing housing at a price that will meet the pocketbooks of American workers. One-third of the homes built in 1940 cost \$3,000 or less with down payments of less than \$100 in some cases. Three-room modern apartments with kitchen and bath are now common in the \$40 range. There is still need for housing to shelter adequately the \$1,000-a-year income group, but men in the industry believe that their accomplishments in the past few years indicate that they can do this job, too, without Uncle Sam becoming a landlord for his least prosperous children.

At this moment workers and management in the construction industry are confronted with perhaps the biggest rush job ever attempted on this continent—the building of cantonments, naval bases and factories for military supplies that will help to make this nation a combined fortress and arsenal capable of withstanding any attack. Typical accomplishments already reported are the building of the Chrysler tank plant in 70 days—clearing and enclosing the site of the North American Aviation plant within 80 days—near completion of cantonments for the housing of 1,400,000 soldiers. Within 12 months' time, builders and their suppliers will have put together the structural parts of a defense industry new to this country.

What the construction industry has done in providing shelter for its citizens and its workers, how it hopes to make the city of the future more nearly conform to the needs of its inhabitants and how it is proceeding with its task of providing working space for military needs are told in this, the tenth in a series of articles on the free enterprise system.

The Case for Construction

THE DESIRE for shelter seems to be a universal attribute of living things. There are exceptions, of course, but, as a general rule, birds build nests, wild animals find dens or fashion lairs in thickets. Snakes have burrows, spiders spin webs, wasps and ants carry on intricate building operations.

This instinct for shelter is as great in mankind as in any other animal and, since evolution has cost him his place among the fur-bearing animals, his need is even greater. It is so great, in fact, that shelter is usually listed, along with food and clothing, as something man must have if he is to survive at all.

Because of this, those who profess to love their fellow men have lately turned their attention to this question of shelter. On investigation they have found that many persons who ought to have shelter don't have it or have only facilities that are inadequate.

This is socially dangerous. Only a man of the most unselfish philosophy can sit on a curbstone in the rain and not envy the fellow whose snug hearth he can see through a cheerful window.

The conclusion that something ought to be done about this is inescapable. The man on the curb inevitably needs a house. The question remains, where is he going to get it?

There was a time in this country when the answer to that question would have been easy. His neighbors would have built it for him. In those days wagon trains were rolling westward. New communities were springing up along the trails or at the river crossings. Building materials grew in the nearby forests and, when a desirable new resident arrived, the community assembled, held a "log-rolling" and set up a new cabin for him.

Today the answer is far less simple. Houses cannot be built by rolling logs or cutting sod. In fact, the whole definition of shelter has changed because adequate shelter today must protect not only man but his possessions and those possessions have grown from a plow, a horse or two and a spinning wheel to gigantic industrial plants, covering acres of ground and rising many stories in the air. Moreover, the rutted wagon tracks that linked those huddled huts of the past must today be transformed into broad highways, boring through mountains or rising over rivers on safe bridges.

This kind of construction cannot be handled by assembled neigh-

Sermons in factories

I appeal to men to reiterate and sustain the doctrine, that the man who builds a factory builds a temple, that the man who works there worships there, and to each is due, not scorn and blame, but reverence and praise.

—Calvin Coolidge



CUSHING
When hammers are swinging and buildings are going up, people get the idea that good times are on the way.

Taxes in rent receipts

A recent Gallup poll reported that 25 per cent of the people think they pay no taxes. But everybody pays taxes, whether he knows it or not. Practically everybody pays real estate taxes. Something like 34½ per cent of a house rental bill is in taxes and 28 per cent of the average business property rental is in taxes.

—Myers Y. Cooper, former governor of Ohio

Where capital comes from

Construction has been the nation's number one capital fixing industry, its primary investment creator. From the first beginnings of civilization, practically all of the permanent tangible wealth acquired by the human race is invested in construction. It takes the savings of our people and of our industries and converts them into forms of durable works, structures and facilities that serve modern community and rural life, shelters for processing and for people. More money finds its way into completed construction than all forms of investment combined.

—W. A. Klinger, Sioux City, Iowa—
former president, Associated General
Contractors of America



Building a house is a thrill that ought to come at least once in a lifetime to every married couple.

bors welcoming a new arrival. It is a task for experts and, as always when social progress creates a need, the experts have appeared. We speak of them broadly as the "Construction Industry".

However, construction is not really an "industry," at all. It is a combination of many industries all engaged in a common economic activity—an activity that is designed to provide each citizen a place in which to live and work, to give him safe and comfortable transportation over roads and bridges, to supply a framework through which he can receive such things as electric power and water by touching a switch or turning a faucet. The products of this industry range from the single family house of John Jones, mechanic, or the silo of Farmer Smith, to the 85-story Empire State Building, the \$70,000,000 Boulder Dam and the 4,200-foot span over the Golden Gate. At present the industry is working on an emergency job—the preparation of a \$2,500,000,000 shelter for a machine which it is hoped will succor a hard-pressed neighbor and keep war away from our own doorstep.

Construction affects us all

HOW these various industrial groups converge upon the one great activity of construction and the resultant effect upon our daily lives; how they are handling the defense assignment; what they are doing to make adequate housing available for our citizens; how they have met demands of the machine age for engineers who can divert rivers or create windowless buildings; and how they see the job of rebuilding America of the future, is the subject of this article.

Activity within the construction industry begins with the producers of cement, lumber, structural clay products, stone, structural steel, plumbing, heating, electrical and other building products. About 50 separate types of manufacture contribute materials and each one of these types has at least 100 or more individual companies. For example, there are reported to be 25,000 saw-mills in the country and this is just one of 50 manufacturing types.

On the site are the designing and contracting organizations; engineers and architects, general contractors, operative builders and subcontractors.

Between the manufacturers and the men who turn their materials into structures are the wholesale and retail distributors of building materials and equipment. In addition to the building materials dealers there are plumbing contractors, heating and ventilating shops, sheet metal shops, electrical supply dealers, hardware stores, paint stores and others.

Then there are two other great service groups. The mortgage financing institutions and the realtors. One helps provide the all important cash—the other helps create the urge for a cash turnover.

Not directly associated with these groups, but closely allied because of the tremendous effect upon their business, are the suppliers of home furnishings for residential construction and industrial fittings for factory and commercial buildings.

When any economic activity involving all these groups is slowed up, the inhabitants in every corner of the nation will feel the slump

in their pay envelopes, although the real cause may not always be apparent.

But on the other hand, when the construction industry turns upward, it acts as a powerful stimulator to the whole business tide. Railroads have more traffic; motor trucks are busy on the highways; scores of industries, such as lumber, structural clay products, cement, paint, electrical and household appliances, furniture, carpets, draperies, take on new life.

Swinging hammers and flicking paint brushes may put a rosy atmosphere in front offices but they create an even more comfortable morale among the rank and file. No one has to go to Detroit or Gary, Ind., to feel and see the construction industry when it is in full bloom. It is just as evident in What Cheer, Iowa, or Buford, Ga., as in the centralized locations of more compact industries. Every one knows the inspiration aroused when he passes through a city or town and sees the steel or wooden skeletons of new buildings rising from the ground.

"This is a booming town," says the traveling salesman and the word spreads that "things are getting better—you ought to see those new store buildings going up in Creston and over in Christianville—it looked to me as if they were putting up a new house in every block."

Except for the very largest industrial and commercial projects, construction is a local industry. It employs home town boys from bankers to laborers. When the banker can keep his money working and the laborer can count on a weekly pay envelope, there is not likely to be much agitation for changing our way of life.

Government statistics indicate that, from 1920 to 1930, the number of workers directly dependent on construction was more than 3,000,000 and 3,500,000 additional were employed in the service of supply. The manufacturing of iron and steel, machinery and transportation equipment, including automobiles, altogether required less than 3,000,000. Only agriculture and the retail and wholesale trades employed more workers.

Chicken dinners from concrete

IN ADDITION to all the mechanics who see an extra chicken in the pot when concrete mixers roll by, thousands of so-called white-collar workers are engaged in selling the job and finding ways for getting enough cash together so that Citizen Jones of Centerville can build a \$4,000 house on a \$2,000 income or helping Storekeeper Smith build a new emporium on his previous good record of operating a profitable business.

Since the first World War, several efforts have been made to bring together the diverse and, in many instances, highly competitive groups in the construction field. But none took root until the Construction and Civic Development Department of the Chamber of Commerce of the United States was asked to provide a common roof under which these several interests, including labor, could get together. Because the Chamber embraces in its membership all types of business in every section, it was in a position to initiate a repre-



Colonial Village, near Washington, D. C., was one of the first, large-scale, garden apartments. It has suburban advantage of isolation from city traffic, but is only 15 minutes from heart of business section. Waiting list grows larger even though original buildings are now five years old.

It represents an investment of nearly \$4,000,000, has 1,060 units and average monthly rental per room is \$13.50.

Talent is available

The construction industry has suffered from internal frictions and abuses; but it has achieved masterpieces of architectural and engineering skill through overcoming tremendous obstacles, most of them peculiar to this industry. Today's problem is to remove or ameliorate the many remaining obstacles, in order that the great technical and managerial skills of the industry can function to their utmost capacity and make their fullest possible contribution to national prosperity and social well-being.

—Thomas S. Holden, president,
F. W. Dodge Corporation

Home buyers get billion

The upswing of production, pay rolls and jobs in 1940 brought a ten-year record in lending activity to the savings, building and loan associations and cooperative banks. The most active December since the records were kept made a total of \$1,199,579,000 disbursed during the 12 months to the nation's home buyers, builders and modernizers.

—United States Savings and Loan League Bulletin



The Transportation Building at Chicago Fair in 1933. Note modern architecture in comparison to photo on opposite page.

What we really defend

What we are really preparing to defend with our great all-out effort to make the country impregnable is our pride in home ownership and in the other characteristics of American life which go along with it. In the savings and loan associations and similar institutions the background has been provided for willingness to defend those concepts at any cost.

—Robert E. L. Hill, Columbia, Mo.
Former president of Rotary International

Building with no future

As in the first World War, we are now creating a vast armament industry which, temporarily at least, is taking up the slack in industrial production facilities and is reducing unemployment correspondingly. The direct effects of this program, however, are largely confined to comparatively small areas. As has been so tragically demonstrated in Europe, the making of guns, tanks and battleships does not create useful wealth. The armament industry merely draws upon and dissipates accumulated savings and places a mortgage upon the savings of the future.

—Lewis H. Brown, president,
Johns-Manville Corporation

sentative and continuing activity on behalf of construction. Annually for four years, leaders in each group have met in conference under the Chamber's sponsorship and steps are gradually evolving that promise to integrate this complex economic activity.

America needs construction work as something substantial on which to build future prosperity when the defense program is finished or greatly reduced. It is needed as a cushion against a too violent readjustment at that future date. It is needed as a continuing support to brace up our fiscal economy from the taxable income which flows from the creation of permanent, useful structures.

Right now, in this emergency, the United States needs private construction work as a sound foundation for the defense program. This is the enterprise that must provide shelter for a new armaments industry and an enlarged military structure.

Before the armaments industry can be well started, the construction industry must do a rush job which has been superimposed upon normal activity.

Defense is big job

PLOPPED into the laps of this nation's builders is a more than \$2,500,000,000 order for cantonments, shipyards and enlarged factory facilities. The job envelope is marked *Double XX Rush*. The customer wants the biggest part of it before early summer and about 90 per cent completion before the leaves turn red next autumn. There may be more to come and the deck must be cleared. A \$2,500,000,000 order may not mean much to you, but it tops by several hundred million the total job done last year in private construction of factory and commercial buildings and last year was a good year—the best since 1931 for that type of construction. It is as big an order as the industry was asked for in the furious year, 1918.

Yet the amazing thing about it all is the calmness with which construction men have accepted the job. Of course there has been scurrying about to get specifications and anyone who knows contractors realizes that they will race each other to get to the brick pile first and there have been tiffs over the labor supply. But veterans in the game say this is not the mad confusion of the first World War.

The actual construction projects are concentrated in large and small spots that stretch from Newfoundland to British Guiana on the northeast coast of South America; from Alaska to Panama on the Pacific. Horizontally you can fly from Bermuda to Hawaii or even a few islands farther west and find defense projects in scattered cities and hamlets all along the route.

These concentrated building spots will be scattered around continental United States about as follows: North Central states, 23 per cent; South Atlantic, 20; South Central, 18; Pacific-Mountain, 16; New England, 12; Middle Atlantic, 11. Off-continent contracts awarded to date amount to about one-twelfth of the total. The *per capita* expenditure for all this government building runs from about \$14 in New England to \$4 in the Middle Atlantic states. These fig-

ures are not necessarily final because projects are being added almost daily.

To get a detailed picture of what is going on in one of these busy spots, we might take a look at San Diego, Calif., where the local Chamber of Commerce lists the following naval projects under construction or expansion:

A naval hospital, Marine Corps base, naval training station, destroyer base, naval air station, naval fuel depot, naval supply depot, dredging operations, naval reserve armory, naval operating base, defense housing units, miscellaneous defense items or a total expenditure of plus \$29,000,000. In addition, there are three expanding aviation plants in the community and some additional construction for the Army. San Diego is an unusual example, but it gives some idea of the variety of construction jobs now under way.

Other communities may not have such big projects, but the builders who have the job of building million dollar projects in small communities have perhaps an even more difficult task of assembly than the big city builders have with congestion. From Umatilla, Ore., to Tullahoma, Tenn., may sound like a Marine Corps battle cry to the uninitiated, but to contractors and building supply manufacturers it represents two big jobs that they will fight to get despite their comparative isolation in thinly settled districts. Umatilla county on the Columbia river has a population of only 25,000, but it is to be the site of an \$8,000,000 ordnance depot. Tullahoma, a town of 4,000, midway between Nashville and Chattanooga has been chosen for a cantonment location that may house as many as 20,000 soldiers.

Unsung war heroes

THESE TWO are typical of scores of other plants and camps all over the country but no one ever heard of a contractor refusing a contract because of inaccessibility. He expects a fair return and it's his business to be able to do such things, but they are prosaic accomplishments to the layman simply because they are so common. The whole nation bragged of its 90-day army officers who were created in the course of the World War, but who ever heard of the contractors who built giant cantonments in the same length of time under terrific pressure, with squadrons of only partly trained craftsmen, oftentimes confused specifications and traffic jams that delayed material deliveries?

The Quartermaster Corps now has almost 300 of these projects under way. Of these, six exceed \$20,000,000 each, ten exceed \$10,000,000, and the others range down to a few thousand dollars. Less than 50 are manufacturing and storage plants, the others are all for troop housing. In addition, there is naval building and a great quantity of private building for enlargement facilities is going on in about 400 more locations.

The size of the cantonment job is indicated by the fact that the Army had housing for only 300,000 men at the beginning of this program and now wants quarters for 1,100,000 more. Troop housing where from 20,000 to 40,000 men are to be trained requires a

Make haste slowly

One thing we need to recognize is that our housing problems did not come upon us overnight. They are the accumulation of generations. They are not, therefore, to be cured overnight. They require patience.

—Charles F. Lewis, director of Buhl Foundation, developer of Chatham Village in Pittsburgh

The defense housing job

Most of the recent comment on defense housing has centered on the cities which people seem to think will turn out to be ghost towns after the armament program has tapered off. Actually, the vast majority of defense contracts are being awarded in established cities and the demand for housing will come from reemployed or more gainfully employed persons who have long lived in those cities. Therefore, the biggest job of defense housing will be along the lines of ordinary building and lending business in hundreds and hundreds of cities and towns where savings and loan associations are particularly well established and in a position to do the job. There are, of course, some problems in connection with "temporary" cities arising from the defense program but the volume is comparatively small.

—Morton Bodfish, executive vice president, U. S. Savings and Loan League



CULVER

The Administration Building at Columbian Exposition in Chicago in 1893. Compare architecture with building on facing page.

Tax methods obsolete

The general property tax, instituted in the early days of this country and designed to meet the revenue needs of a community life largely agricultural in character, is no longer a proper yardstick for measuring wealth or tax-paying ability to meet the revenue needs of the highly organized economy of the twentieth century, and is as outmoded as the powdered wigs and the quill pens of the men who designed it.

—From platform of National Real Estate Tax Conference

Room for private building

Private construction in general work will not long have to make way for defense. In 1940 about 545,000 non-farm housing units were built in America, of which 75,000 were built by public agencies. Measured by this scale, the defense housing will not place a very heavy strain on industry. Cantonments, defense housing and some industrial plants all come at the beginning of the program. Later, most of the defense work will be made up of manufacture and military training. Shortages of building materials, other than possibly some of the metals, are likely to be over in a few months. Accordingly it is desirable to go ahead with normal building construction as fast as market conditions warrant.

—Charles F. Palmer, Defense Housing Coordinator



Building an underground vault for installation of power machinery at the new Douglas Aviation plant. Just one of many interesting problems that the construction industry has met in building defense plants.

considerable variety in types of construction. The smaller one would need 900 buildings including hospitals, warehouses, refrigeration plant, bakeries, laundries, theaters, recreation buildings, hostess houses and the barracks.

Just in passing, it might be said that a typical camp requires 27,000,000 board feet of lumber; 28,500 squares of roofing material; 4,000,000 square feet of wall board and 873,000 pounds of nails.

More than half of the \$2,500,000,000 for construction will be spent on housing for soldiers and workers in areas where sufficient shelter is unavailable. Over \$500,000,000 will be spent for construction of productive facilities. In addition, it is estimated that private companies will spend nearly as much more for plant expansion to handle defense and civilian needs.

Handicaps don't scare them

THESE expenditures for plant facilities will provide the housing for the machine tools and other needed equipment to turn out toluol, powder, shells, armaments, airplanes, guns, tanks and other munitions. Where the Government is handling the financing for private companies, it pays one-fifth of the cost of plant each year over a five-year period. The company has the option of buying the plant at the end of this period. If it does not, the Government retains ownership.

Where private companies working on defense orders are doing the financing themselves, the Government allows them, for tax purposes, a short amortization period of five years. Some of the defense plants, such as powder and shell loading factories, will in no case be taken over by private companies. The Government is paying for them outright, will own them permanently and lease them to private companies for operation.

Management in the construction industry is not disturbed by the magnitude of this emergency job. Engineers, architects and builders who can create such monuments as Rockefeller Center, Moffatt tunnel, Golden Gate bridge, huge steel plants and 3,000-unit suburban apartments are used to meeting and overcoming handicaps.

Cantonment building is chiefly a problem of organization and speed. Shipyards and naval bases are more complicated, require more engineering skill, but are no more a problem to a firm specializing in this type of construction than building 100,000 automobiles is to an automobile company. Expanding present manufacturing facilities or building new shelter for powder making, tank production, ordnance storage and the like should not be difficult for large construction firms which are prepared to operate any place in this hemisphere if necessary.

The chief characteristic of this emergency contract is speed. Its size in both physical and monetary aspects is not so startling when compared with an estimated over-all construction, maintenance and repair volume of nearly \$10,000,000,000 in 1940 and the record years of \$14,000,000,000 each in 1926 and 1927.

It seems safe to say that the construction industry, which has not been employed to full capacity at any time in the past ten years,

is prepared to handle a considerably larger volume of business than it had in 1940. Many of the large contracting organizations were comparatively inactive during the first half of 1940 when large public works contracts were tapering off and small-type private residential and commercial building were rapidly increasing.

The first result of letting defense contracts was thus to reemploy a department of the industry that had been having a slack time. The emergency building is bringing about, practically for the first time in post-depression years, full employment of both the large and small scale branches of the industry. If it were possible to schedule all this increased activity throughout the year, the industry could probably handle a 25 to 33 per cent increase over 1940.

The rush job has created unusual and sudden demands for materials, skilled labor and building labor. While this program is going on, temporary local shortages of certain classes of labor and some difficulties are experienced in getting prompt deliveries of materials for private jobs.

According to the National Association of Real Estate Boards, the median rise in cost of home building materials since the defense program took hold has been ten per cent, but the rise has gone higher than that in 47 per cent of the cities. Getting sufficient home building materials has become a worry in about one-fourth of our cities, but an actual shortage has been reported in only four per cent of them so far.

The same report says that labor costs are a problem in more than half of the 237 cities covered by the survey and that a labor shortage has developed in about one-fifth of them.

If this trend increases to any appreciable extent, the results may well lead to serious curtailment of private construction, but if labor, material supply people, builders and prospective owners can be persuaded to look ahead for a few months to a time when the present rush will be over, demoralization of the private building market should be averted. Such a scheduling of activity by general public consent would make government priorities for construction unnecessary.

Guarding against a boom

THE BUILDING industry recognizes that, more than ever before, the potential demand for its product is in the moderate priced field and that rapidly rising building costs would do more to curtail private construction at this time than any other factor in the situation, actual or potential.

There are strong reasons for expecting general commodity price increases which will be moderate rather than spectacular, but the housewives' boom of sugar prices collapsed, steel is holding down and other industries are using every possible method to prevent an upsurge. Lewis H. Brown, President of Johns-Manville Company, made articulate the thoughts of construction men when, at the industry's conference called by the National Chamber, he said:

The one lesson that I hope has been well learned is to avoid any

Keep "Normalcy" in mind

It is fundamental to the abnormal situation that the industry must bend to the needs of the emergency but without surrender of independence and initiative, and when "normalcy" has been restored it should be able to shift from government to private building without loss of competence. Where the necessities of the emergency require government control, the industry should understand the reasons for it and should exert its influence to see that these controls are carefully thought out and that they do not become greater than are needed to gain their immediate objectives. Such a democratic process in an emergency implies a self-discipline more difficult to impose than dictatorial regulation.

—Alfred Rheinstein, chairman, Coordinating Committee, N. Y. Building Congress

Too many specialists

When work becomes scarce or individual jobs shrink in magnitude it is costly and cumbersome to divide a trade into many subdivisions. The old-fashioned carpenter, for example, besides building forms and framing, could lay floors, erect trim and even do cabinet work, and was a far more secure and dignified craftsman than the current specialist. A mason could lay face brick as well as common, handle concrete and cement finish as well as plastering. It is not intended even to intimate that we revert to the old method but it is recommended that present custom be modified sufficiently to allow men to get as broad a training as is possible and to acquire more flexibility.

—Report of Coordinating Committee to the New York Building Congress



Tinsmiths get a workout on a typical army barracks. The army had housing for 300,000 men at start of program—now wants quarters for at least 1,100,000 more.

Thumbnail economics

Savings may be buried in a napkin or put to use. We can voluntarily pool these savings and lend them to (by buying bonds), or go into partnership with (by buying stock), a group of men who employ them in some productive enterprise—an electric light plant, a department store, an oil well. If we place these savings in insurance, the company in turn places them likewise in productive enterprises. Similarly, if we place them on deposit in banks or in building and loan associations, such enterprises keep not only our savings at work, but, since they are productive—that is, keep constantly at work—provide continuous employment for men.

When the State takes these savings by taxation and spends them on productive enterprises, we have State capitalism. When the State spends them on non-productive enterprises, on overhead, on boondoggling, the amount left for productive enterprises is less. When profits—savings—dwindle because of business stagnation, and the State continues its levy, there comes a time when there is nothing left for productive enterprise. The State might collect more, borrow and commit future savings and spend. If it spends on productive enterprise, power plants, factories, or provides banking and mortgage facilities, it competes with the source of its revenue and ultimately dries it up, the while preventing the creation and development of new fields of business activity.

—“The American Spirit”



Lumber companies began to preach that timber was a crop many years ago. This group, all of whom are old men now, in the employ of a private company were planting seedlings which are probably ready for cutting today.

revival of that “boom” psychology which opens the throttle wide and ignores the inevitable consequences that must follow. Down that road lies a new depression—one from which there may be no recovery for our American enterprise system. With our present topheavy national debt, with the weakened state of our economy, we must keep constantly in mind that any fresh relapse may prove fatal to the American enterprise system. We must be vigilant to see that building costs do not rise any further than the incomes of home prospects. We must carefully rebuild confidence on the part of the prospective home builder which, in the years ahead, may be the all-important key to a continuance of the recovery effort without further dependence upon government spending.

Earlier this year a government official attacked the lumber industry for price raises. Lumber is a basic material in both home and cantonment construction. Production was 29,000,000,000 board feet last year. The cantonment program so far calls for 2,000,000,000 board feet. The pressure for delivery since last fall has been tremendous because the Government has been calling for largely one grade of lumber. A few speculators have taken advantage of the situation, but does any sane business man believe that leaders in the industry have any desire to paralyze their home market (90 per cent of production) by raising prices to exorbitant heights? Lumbermen know that the peak of government buying from them has already passed and that the temporarily advanced price was an inevitable result of mass purchasing.

Economics, not Government, lowered prices

WITH the peak of government purchasing now passed and the pressure for delivery eased up, prices have come down and will remain at a reasonable rate unless the Government starts another rush building project. If the price should become out of line with other commodities, private construction would be stymied and no one would suffer more than the lumbermen themselves. They resent the attempt to tar them with a “profiteering” label and what looks like an attempt by government officials to claim credit for forcing a price reduction when the price was going down anyhow as the result of natural economic laws—years and years ago it was called the law of supply and demand.

That lumber price and its effect on home construction gets at the very heart of the construction industry. Over long periods, residential building averages approximately 50 per cent of the building construction in the United States. From 1920 to 1930 the average number of dwelling units built was 700,000 annually in urban and rural non-farm areas; the dollar volume, including alterations, repairs and maintenance averaged between \$3,000,000,000 and \$4,000,000,000. In 1933 the number of units built declined to 60,000. The output of new housing accommodations started upward again in the middle '30's, reached a 12-year high in 1940 of around 550,000. In 1941, the total should be even higher with a dollar volume over \$2,000,000,000.

It isn't necessary to tell why more homes are necessary. There has been enough publicity on the subject to assure us that anyone

who is uninformed of the need won't be reading this article. It seems sufficient to say that normal replacement requires about 600,000 units a year and the shortage is now large enough to keep residential builders on the job for many years. Prospects are exceptionally good for the immediate and near future because homes are built most frequently when interest rates are low, rents relatively high in comparison with construction costs and vacancies hard to find.

Government built housing has complicated the picture over the past few years and the defense housing program is disturbing to many private builders, but C. F. Palmer, Housing Coordinator of the National Defense Advisory Commission, has repeatedly stated that the Government will not stick its fingers into any defense housing projects that private builders can handle. The Government will insist that housing be provided in any area where suitable housing for defense personnel is lacking but every effort will be made to obtain private construction before the Government steps in.

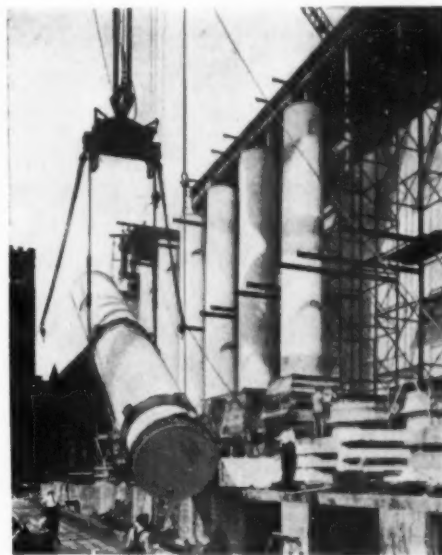
Mr. Palmer listed some of the examples where private enterprise can't operate as follows: A powder plant in an isolated area where workers may be needed only six months. No private builder could undertake a housing project on that gamble. Another situation would be an army post where there is no suitable housing for families of enlisted men getting from \$30 to \$60 a month.

He also told attendants at the construction conference called by the National Chamber that the Government was working toward solution of the problem foreseen in removing temporary housing when the emergency is over so that there will be no danger of providing a new slum section or another government operated rental project to compete with local realtors. They are working with demountable houses that may be taken to other areas where there is a need for them and the value can be partly recaptured. He credited one particularly notable example to the business men of Portsmouth, Va., who obtained a Hudson river excursion boat, anchored it near the city and refitted it to provide shelter for some of the workers coming to that famous shipbuilding center and naval base.

As proof of his contention that the Government would only build defense housing which private operators didn't want, Mr. Palmer cited Los Angeles where, out of 11,600 permits issued, the Government handled only 400 and they were for families of enlisted men. Mr. Palmer spoke early in December.

Where Government builds houses

A SAMPLE of how the defense commission is carrying out this policy is given in a release dated January 17, 1941. In a news item telling how private construction could not be expected to provide dwellings at rentals which enlisted men pay, an order is published for immediate construction of 1,918 dwelling units in the following communities. Hinesville, Ga., 100; Rantoul, Ill., 100; Brooklyn, 200; Erie, 500; Orange, Tex., 200; San Antonio, 17; Norfolk, 665; Radford, Va., 200. All are to be built by Federal Works Agency in addition to 1,435 already assigned to these same communities. The news item added that the Brooklyn project was to be of permanent



Moving stone into position is no job for amateurs. Stone cutters and workers are among most skillful of craftsmen.

Government scares itself

No contribution to defense can be greater than that of sound public finance. A concerted effort to reduce state, county and municipal budgets by ten per cent—which would seem thoroughly feasible as a result of our present increased industrial activity—would not only stimulate home building activities greatly but would be a most heartening sign to taxpayers that the Government is at last becoming economy minded. . . . In many urban areas the burden of real estate taxes has already reached confiscatory levels. This situation has become so serious that even the Home Owners Loan Corporation, which through foreclosure is now the greatest real estate owner in the country, has become alarmed. Dr. William H. Husband, member of the Federal Home Loan Bank Board, recently declared, "No community can continue to obtain revenue from inequitable tax rates when people have the power to move away—and that is what they are doing in a great many American cities."

—Lewis H. Brown, president,
Johns-Manville Corporation

Home-building begins at home

The people of this nation in the long run will be better served with private home financing than they would be with government home financing, either direct or indirect. The most successful system of home financing is a system where each local community develops its own local thrift and home financing institution for the accumulation of local savings to re-lend them for the financing of homes of that community.

—Fermor S. Cannon,
Railroadmen's Federal Savings & Loan
Ass'n of Indianapolis



It wasn't many years ago when kitchens of \$3,000 to \$5,000 houses were habitually equipped with a tin sink.

The job of peace

If we would even off, perhaps prevent, the depression which usually follows a war, we must work and plan today—plan for the immediate conversion of plants-of-war to plants-of-peace so that men may continue working. At that time we also will have the demobilized soldiers as well as our plant workers seeking steady employment, with unemployment compensation and bread lines the alternative. We want to avoid all that. I believe that much of it can be prevented through careful planning—today.

—Philip W. Kniskern, president, National Association of Real Estate Boards

Borrowers in driver's seat

Mortgage lending financial institutions are liquid, have plenty of cash for investment and are searching for good mortgages in a borrower's market. It is a proven fact that real estate mortgages are the best form of investment for all purposes.

—Bernard F. Hogan, president, Greater New York Savings Bank, Brooklyn

construction and units were to rent at from \$11 to \$26 a month.

Another example is in Ogden, Utah, where the Government was planning to build housing for numerous workers but promised to withdraw when local business men offered to organize a \$500,000 corporation and supply all the needed housing.

It is expected that the Government will finance the construction of about 80,000 houses this year and that, during the year, private industry will build over 500,000, many of which will be rented or sold to defense workers. The housing situation is tied up closely with defense because some people remember what happened in 1917 and '18. The labor turnover in manufacturing plants working on war materials was sometimes 1,000 per cent because living conditions were so unpleasant that the workers could not satisfactorily house their families.

Defense may bring slums

THE ARMAMENTS industry is being tuned up by the Government for capacity operation and the problem of personnel congestion is again with us. Business men want to make certain that most of the former mistakes, whether made by Government or industry, are not repeated. They don't want to see temporary, makeshift shelters, created for munitions workers, left standing to become slum areas after the emergency any more than they want government agencies to take them over and turn them into rental properties in competition with private industry.

Many of the handicaps which faced the building industry in the last emergency are not imminent today. There is no such general shortage of labor and building materials. Transportation facilities are highly improved and will help to avoid the priorities problem. There is no shortage of funds to lend for housing operations. Furthermore, the higher level of wages as compared with living costs makes it easier for workers to meet their payments for shelter. Between 1914 and 1939 average wages in manufacturing increased from \$11.61 to \$24.58. Allowing for the change in the cost of living of 38.5 per cent in this time, the increase in real wages per week has been about 53 per cent. House rents, which are included in the cost-of-living figures, increased only 13 per cent.

There is no indication now that rents will skyrocket. In a recent survey by the Bureau of Labor Statistics in 33 large cities, rents in September, 1940, averaged only 0.3 per cent higher than a year earlier and 0.1 per cent higher than in June, 1940. There are examples such as South Bend where rents increased 7.3 per cent from October, 1939, to October, 1940, and in Bridgeport, Conn., where there was a 2.9 per cent raise, but in the largest cities where defense orders have been placed, the average advance in rents has not been much greater than for large cities as a group. Typical rent increases have been about \$2.50 to \$3 a month. Increases of more than \$5 are exceptional, the survey reveals.

In view of this comparatively stable rent situation, realtors are a little skittish about rumors and hints that the Government is getting ready to apply rent controls. Harriet Elliott, Commissioner in

Charge of the Consumers Division of the National Defense Advisory Commission, has said that in some communities where military expansion has brought a great influx of people, protective measures may have to be formulated. But at the same time she also stated that "rent control" was undesirable.

"Even where some measures to maintain fair rents are necessary," Miss Elliott said, "cooperation of landlords, where this can be made effective, is preferable to legislation."

In a recent statement emphasizing the danger of rent control and its effect on building new houses, George W. West, former president of the United States Savings and Loan League, said:

Certainly there is no more efficient way of discouraging new construction of homes than to limit or wipe out the income on real estate ownership and investments.

His cure for excessive rents is to keep on building homes so that there will be no shortages. He warned against repeating the Canadian experience of freezing rents in 30 cities and the consequent advice of a Canadian insurance official who pointed out that rentals must be allowed to increase somewhat if builders and investors in real estate are to undertake a program of construction that will meet existing shortages.

Mr. West's idea that building more houses will stabilize the rent situation seems to have been put to work. According to figures released by the F.H.A., 7,768 new homes were financed under terms of the National Housing Act in the first three weeks of January, 1941, as compared with 4,630 in the corresponding weeks of 1940. The greatest proportion of this new building was in key industrial areas where defense activity is heaviest.

Homes build democracy

ALL PAST experience shows that the vital work of providing sufficient and adequate shelter for the workers in industries devoted to defense activity must parallel, and not lag behind, the expansion of those industries. In the words of Bernard Baruch, housing of defense workers is one civilian activity that is essential to war aims.

Even if there were no defense program, the small homes department of the construction industry has a leading role to play in the maintenance of American democracy. The slogan that a nation of home owners is a nation slow to wrath cannot be repeated too often. Leaders in the industry know that, when the time of readjustment comes, this industry in particular must be prepared to take up the slack—become a leader in the effort to reach a national income of \$90,000,000,000 without price inflation or lower living standards.

The industry is looking beyond this immediate period, so dependent upon government spending. Probably no other industry could contribute as much to the solution of unemployment. And sadly enough, it is on the small home industry that the most bitter attacks on construction are centered.

Influential men in all branches of the small home field know that



Today's modern kitchen in a house of the same price as one on opposite page has almost every known kitchen gadget available and in most localities a refrigerator and stove is included in the purchase price.

Houses for defense

The Defense Housing Insurance Fund will provide, only in defense areas, for 90 per cent insured loans up to \$4,000 on homes for owner occupancy or for rent or for sale. Commitments can be made to corporations which will be released from under the mortgages when the ten per cent down-payment has been met by monthly installments or otherwise. However, the mortgagor may remain on the paper and rent. The D.H.I.F. now proposed as \$100,000,000 will be used only where normal existing channels are impractical, but where conditions are not so hazardous that Uncle Sam must take the entire risk.

—Charles F. Palmer, Defense Housing Coordinator



Parkchester, developed by the Metropolitan Insurance Company in the Bronx, is the world's largest single rental project. It includes 51 apartment houses, five theatres, two store buildings.

Rich field for investment

From every standpoint, the building of a home seems to be a good, conservative business investment, entirely aside from the dividends it will pay in better living. And if it is a conservative business risk, with many factors in favor of building now, another tremendous field is opened up. This is construction for strictly investment purposes, the building of single or multiple units; not for sale to the families that will live in them, but for strictly rental purposes. Many of the possible home owners do not want to own, but to rent; and with building conditions so favorable, with the easy financing that is now available, this field of investment for rental purposes is a tremendous one that deserves a lot more attention.

—I. N. Tate, vice president,
Weyerhaeuser Sales Co.

Taxes hurt renters

Taxation is one force which tends to influence materially the ratio between gross and net rents. The effect of an increased tax in lowering the net rent of property is likely to result in making it unprofitable to build new homes. In recent years, the increasing burden of taxation has tended to act as a brake on private residential construction.

—Willford I. King, Professor of Economics,
New York University

there is room for improvement. The point is that they are making far more progress than will be admitted by the critics who harp upon isolated examples that are just as detestable to the average builder or realtor as they are to any other citizen.

Granted that the industry is making progress slowly— isn't it in about the same category as any other industry that is more than 50 years old? Too much time is given to comparing it with the new and more dramatic industries that have come a long way in later years because they started from nothing. Practically all types of construction, and particularly building equipment, have reached such a high degree of perfection that further improvements are largely a matter of refinement as against basic changes which are common to the newer industries. Fifty years from now, the present new and dynamic industries may be accused of senility and obsolescence because they didn't find a way to lick some particular problem within a short time. Some of them may not even survive.

The greatest handicap of the small homes industry up to now has been the complexity of its product and the number of operations it takes to handle a deal. Even the smallest home has approximately 30,000 parts and is so bulky that it must be assembled on the ground. But when that home is completed, the buyer is getting far more for his money than he could have collected for the same amount or even more if he had made the purchase ten years ago.

Let us take a look at some of these new houses. Compare them with almost any house built ten years ago, in some cases only five years ago, and you will find as much equipment packed into a five-room house as formerly went into seven rooms. There will be no hint of crowding either.

The story of heating is another little detail. The old furnace room is now a clean, attractive amusement room and, with the new forced circulation, the heating unit does not need to be in the basement at all, it might be in the attic. It may function for air-conditioning and summer cooling as well as for winter heating. Automatic heating has freed the family from drudgery, and makes the American home independent of the rigors of climate. It is easily one of the most significant contributions to better living.

Eleven to a bathtub

AN ALWAYS popular favorite for comparison is bathtubs. No one knows why unless cleanliness is particularly significant of America and part of our better standards. Anyhow the daily bath is as common to America as chopsticks are to China. This country has 95 per cent of the world's tubs. While the ratio of bathtubs in the United States is one tub for every 11 persons, the average for the rest of the world is one to every 1,300. In England three out of every ten homes have bathtubs. In Germany one and one half out of ten; in France, one-half out of ten. And compare the present tub, or the entire bathroom for that matter, with what was available 50 years ago. Continuous hot water, any number of electric outlets, built-in cabinets and colors to meet the whims of the most giddy glamour girl.

Not so many years ago, tubs were huge, clumsy contraptions that

would be eyesores today. The general public probably never notices the evolution of an item like bathtubs, but among people in the trade the improvements are just as startling as changing automobile models are to the average citizen—and the end is not yet. A new tub, just announced, is made entirely of porcelain. It is particularly adapted to hospitals because of its sanitary qualities. When it is installed, the owner probably won't know that he is getting a much better tub than he could have bought at any price a few years ago.

Glamour for pots and pans

ANOTHER thing about bathtubs! Today you can get two bathrooms in a \$6,000 house. For the same price just a few years ago the customer wouldn't even have thought about a second bathroom.

Some more about plumbing because it has contributed so much that people take for granted—the very people who had no such conveniences when they were children. More than 12,000 towns have water works which deliver any amount the customer wants at the turn of a faucet and one-third of the water used is hot water. Sewer systems and sewage disposal plants have improved sanitary conditions almost beyond belief and there is many a man living today who uses his bathroom for a temporary reading room, who can remember the wintry blasts which once blew upon him when he visited those quaint old shanties that were decorated with wasps' nests.

Only 15 years ago the kitchen in a \$3,000 house was bare of any equipment except a tin sink and possibly a small, portable cabinet. Today, a kitchen in that same price house will have enamel sinks and drainboards, built-in cabinets and other step-saving facilities that were not even available in high priced houses a few years back. Most builders also install a stove and an electric refrigerator in their medium priced homes and any house built with a kitchen that isn't a veritable bee hive container for pots, pans, groceries, cutlery, brooms and other housekeeping apparatus, is going to be a drag on the market for many months.

Better lighting is another unheralded feature of the homes being built today. Comparing light fixtures with those installed ten or 15 years ago is almost like comparing the old kerosene lamp with the first electric lamp. Indirect lighting and diffused light which eliminates glare are not only easier to read by, but are supposed to cut down the number of necessary trips to an optometrist. Almost every room in a house today is punctured with electric outlets which eliminate all the fun the men folks once had in stringing wires from behind the sofa to over the fireplace, but contribute a great deal to the peace of mind of a hostess who wants her house well lighted when guests call or wants to use the curling iron at the same hour her husband is manipulating his electric razor.

The building materials used in a house are substantially the same today as they were years ago, but the variations and improvements are countless. The best part of these developments so far as the customer is concerned, is that nearly all of them are designed to help him save, either in first cost or in up-keep. Paint manufacturers are working on a two-coat paint instead of the customary three.

Shelter is not enough

The general view is that architectural service for low-cost housing is not required. That is wrong. To design a low-cost house for better living is a more difficult task than designing a mansion. Initial cost must be taken into account, to be sure, but quality products must be used to insure the owner of low operation and maintenance costs. The architect, in his selection of materials, equipment and most efficient layout for this type of home, must add to his already large responsibilities the task of consulting home economists. Our need in this country is not for shelter, but for homes which men look forward to owning, which must be better built and better equipped than the homes they have left.

—Stuart M. Crocker,
General Electric Co.

Taxpayers on the ropes

The real estate taxpayer has become groggy with the unjust burdens he has been compelled to carry. High taxes are our most rigid and chief deterrent to home ownership and home building. The way to safeguard real estate is to limit by law the amount which may be levied upon it. When you put a ceiling over the property tax you have at least taken a decisive step toward the adoption of a tax system that will at one and the same time halt unnecessary spending and underwrite adequate revenues for Government.

—Myers Y. Cooper, former governor of Ohio



Country Club Apartments in Greensboro, N. C. About half of our population live in rented quarters—keep investors and developers on the jump trying to satisfy the urge for city conveniences in suburban sites.

Reason for price rise

Increases in labor costs were nearly double those of building materials in the five and one-half per cent total increase of construction costs for a standard house in the period from December, 1939, to December, 1940. Labor costs went up 7.8 per cent, while building materials were increased 4.4 per cent, making a net increase of 5.5 per cent.

—Bulletin of Federal Home Loan Bank Board, Feb. 8, 1941

Rule for government risks

It is a perfectly amazing thing that men should expect the Government to go into ventures where they will not risk any of their own capital. Except for defense or social considerations, the same policies and dollars and cents considerations should apply in government as in business transactions.

—George W. West, president, First Federal Savings and Loan Association of Atlanta

Meeting labor shortages

Prefabrication, which has crept gradually into the construction of large projects, is particularly adaptable to government work and is surely destined to play a greater part in the industry. If more young men are not trained as apprentices, and other causes of labor shortage go unresisted, then prefabrication will grow to offset the scarcity of available mechanics.

—Report of Coordinating Committee to the New York Building Congress



WIDE WORLD
This was once an alley in Philadelphia where houses rented for \$12 a month. After modernization they rented for \$125.

Plywood and wall boards are designed to save labor costs. Insulation materials depress fuel consumption. Glass, brick, cement, lumber, nails, stone, steel, copper and all other basic materials used in house construction have increased in variety of types and styles. Competition is rampant among the producers and, although the customer may be puzzled as to which is best for his particular purpose, there isn't much doubt that this wide variety of materials makes a competitive situation from which he benefits.

Probably no new development in construction has received more publicity in the past few years than standardization and prefabrication. Builders are not yet convinced that they can sell great quantities of houses that are identical both inside and out, although there seems to be no reason why people should object to standardized houses any more than they object to standardized motor cars.

However that may be, standardization has brought huge savings that the public has not recognized. The basic floor plan for small homes varies only slightly from one end of this nation to the other, and standardized interiors are common in both large and small developments, but they have been disguised by exterior materials, colors and roof arrangements to avoid monotony.

Homes f.o.b., assembly line

SEVERAL successful prefabricated houses are on the market and they are making continuous progress, although transportation still remains a major obstacle in most instances. Additional research may still bring forth a product that will have widespread appeal. Moreover pressure for defense housing is leading to greater acceptance of prefabricated dwellings for emergency purposes. A recent news release from a steel company describes one particular home now in production with welded steel panel framework and asbestos shingles applied over insulation board sheathing. The house is described as a demountable steel frame under a roof of sheet steel panels and of high salvage value if it should become necessary to dismantle and reconstruct it elsewhere. Resting on a foundation and floor slab of poured concrete, with one-eighth inch asphalt tile laid over it, this two-family house can be erected by a ten-man crew in a single eight hour day.

Perhaps the greatest value of the defense prefabricated housing activity will be to serve as an experimental laboratory wherein the prefabricated units may be given a thorough testing.

Critics of the small homes industry center much of their fire on cost of the finished product. Builders admit that their greatest potential market is made up of families who can afford homes costing from \$2,000 to \$4,000 but they also advance proof for their claim that this market is being tapped—that they are making rapid progress in providing suitable housing for all except the very lowest income groups. Visible evidence is provided by the ten per cent of F.H.A. inspected homes last year which were under \$3,000. Further testimony is given by F.H.A. figures showing that in 1940 three out of every ten homes were bought by families with incomes of less than \$2,000.

[illegible][illegible][illegible][illegible][illegible][illegible][illegible]

[illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible]



In order to place more men on jobs, W.P.A. used this old fashioned method to help excavate for All American Canal in the Southwest. Cost was many times higher than it would have been if modern earth moving machinery had been used.

Government can't do it

Low-cost housing is only a portion of a much larger problem which communities are struggling with. Neighborhood rehabilitation and redevelopment, if successfully undertaken, will solve many of the problems which are now presented to us solely in the guise of low-cost housing. The activity in which the U.S.H.A. is at present engaged, direct governmental building of units in which selected families live free of local taxation, is utterly inadequate to cope with the magnitude of the need which confronts our cities both with respect to blighted areas and the provisions of decent housing for low-income groups. Construction of government-owned housing never can reach more than a minute fraction of those who desire and should have decent housing conditions.

—National Association of Real Estate Boards

England is amazed

A contractor friend of mine built a factory in England in less than six months, when the best time schedule any British builder could promise for the job was approximately a year. Not only his client, but also a number of London builders showed the keenest interest in his demonstration of American construction methods and ways of speeding work.

—Thomas S. Holden, president,
F. W. Dodge Corporation

designs, utilizing the best architectural and engineering talent available for this purpose, and has made these designs widely known to builders and material supply dealers who have adapted the designs to their local communities.

Even more startling than the improvements in the modern home, more useful than the reduced cost, is the modern financing which has revolutionized the age-old problem of home-buying. The old way involved a first and second mortgage loan, both renewed at frequent intervals and added costs; a high interest rate and no way to reduce the principal and clean up the debt at any particular time. The new amortized loan is an extension of the principle worked out long ago by building and loan associations. It insures proper selection of the site, expert inspection of the materials, a low interest rate and a monthly payment usually less than the family has been paying for rent, discharges the debt and produces a clear title to the property at the end of a definite number of years.

The equity problem in home buying has always been more difficult than providing mortgage capital. The necessity of down payments has kept many families from achieving their goal. In an attempt to help prospective owners solve the down-payment problem, savings and loan associations have started "Own-a-Home" Savings Clubs in 75 cities in the past year. The down payment which families will need three years from now is being built up month by month in a savings account which pays three or four per cent on the accumulated balance.

Home owning now painless

ANY PERSON who has integrity and, therefore, credit standing, a reasonably certain income and has demonstrated ability to save a portion of his income by accumulating a modest down payment, is eligible to borrow from a savings and loan association. On the average he may take 12 to 15 years to pay it back. He will pay it in monthly installments geared to his income. He is able to get credit today at less cost and keep it longer than he has ever been able to do in history.

Another significant step taken by the small homes industry is a gradually increasing tendency to market its product in one package. Heretofore the prospective owner has frequently had to run from realtor to banker to builder to materials dealer to insurance man and then repeat the operation until he became dizzy. This was probably caused by the internal competitive instincts within different elements of the whole industry which set manufacturer against manufacturer, branch against branch, trade against trade, profession against profession and outlet against outlet. There was no central integrating force to bring the groups together and show them the advantages of correlation. Today, leaders in the industry are moving to clear up this situation.

It is not unusual now to find operative builders and building material merchants who are selling the complete job, even to seeing that tax payments are included in the monthly installments. Others are going a step farther and advocating that arcades be established

where the customer can shop for a house as the women folks shop for potatoes, chickens and bakery goods in the same market. They suggest that everything pertaining to a house be centralized, including furnishings, materials, placing of the mortgage, insurance, rental offices, real estate departments, contractors and whatever is necessary to give the customer complete service in one tightly bound location.

Large construction

IT MAY BE taken for granted that residential building is generally recognized as the backbone of construction—as essential to the industry as readin', 'ritin' and 'rithmetic is to any child who would attain higher education. The algebra and trigonometry of construction are the huge engineering projects such as bridges, tunnels and dams; gigantic apartment projects and factory or commercial buildings that sometimes go almost as far underground as they go above.

In contrast to the home building department of the construction industry which manufactures a consumer product, the large construction department is mainly concerned with selling its services to producers, investors and to the Government. Producers buy factories, light and power plants, pipe lines and office buildings. Investors are particularly interested in large scale rental projects, both residential and commercial, that will yield a modest return on their capital. The federal Government, states, cities and other subdivisions buy municipal and federal buildings, dams, bridges, sewer systems, highways, canals, school buildings and airports.

Industrial private construction is stimulated whenever prospects look inviting and business conditions seem to warrant plant expansion. High interest rates and rising costs of material and labor do not ordinarily depress factory building as they do residential building. Just as such things as number of marriages and migration of families influences home building, so is industrial building influenced by technological development which brings on obsolescence and the necessity for a new or modernized plant. The rise of new industries; unsettled labor conditions; governmental activities such as repeal of the Prohibition Amendment or the taxation of undistributed profits, are some of the influences that help to determine whether or not employees of the XYZ Construction Company will draw their pay checks.

Commercial buildings built to rent as store or office space, although usually classed as large construction, are generally considered separately from factory buildings. The demand for them is largely determined by the percentage of occupancy and depends more upon local conditions than other types of industrial building. There has been no great demand for this type of building during the 1930's or certainly nothing to compare with the tremendous volume in the 1920's when such edifices as the Chrysler Building, Empire State Building and Chicago Tribune Tower were under construction. The average office building erected in the past five years has cost only \$40,000.

Bluebells among the thistles

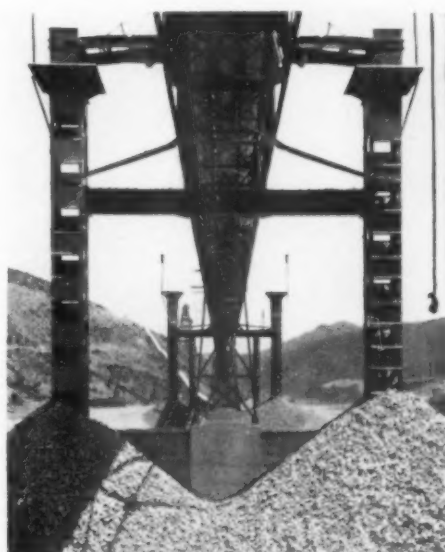
There are still plenty of bluebells among the thistles, and many old buildings are still desirable and useful space. There is a bank building in Providence that has been occupied for over 120 years, and you could not get that firm to move except by the use of dynamite. The space is adequate to their needs and adds to the distinction of the firm by its very antiquity. It has been modernized again and again, added to, made comfortable and sanitary. Throughout the country are neighborhoods in which there are old buildings which, if properly replanned, could take on new life within the old shells.

—Ralph Thomas Walker of Voorhees, Walker, Foley and Smith, New York

Another "unknown" solved

The problems of air-conditioning are being simplified by advances on all sides. With the air-conditioning industry itself well launched in the production of industrial units which have been tried, tested and proved, the manufacturer who puts in air-conditioning today is no longer experimenting with unknown quantities.

—W. J. Austin, late president, The Austin Company

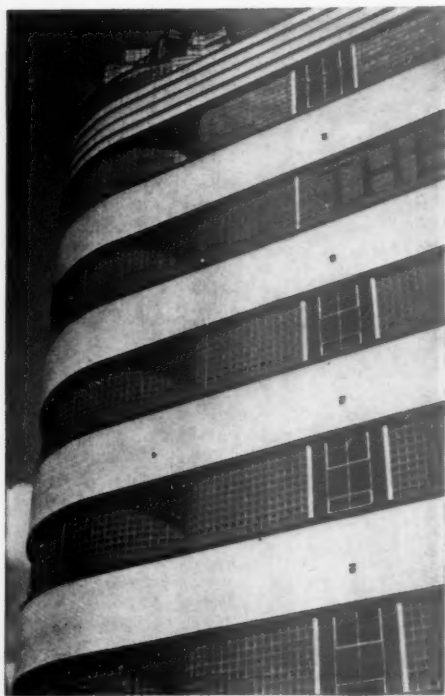


Sand and gravel for Shasta dam is stocked here after a 9-mile trip by conveyor belt shown at top of picture. From these stock piles the aggregate drops down as needed to a conveyor belt below which carries it over the hill to the mixing plant at the dam site.

Let those without sin—

Government, by inaction or desultory legal procedure, must not permit the continuance of correctible conditions that prevent action by private enterprise and then raise its voice with a holier-than-thou attitude saying that private industry "won't." Our big drawback has been the failure of municipalities to cooperate by definite action.

—Philip W. Kniskern, president,
National Association of Real Estate Boards



A new warehouse built of brick, concrete and glass block. Green tint of the glass is combined with buff colored enameled brick and terra cotta, with a black trim.

However, modernization of this type building has assumed considerable importance in the past five years. It has averaged more than \$100,000,000 a year, representing almost half of all commercial building. Store modernization alone has averaged \$59,000,000 exceeding the building of new stores, which has averaged less than \$48,000,000.

Pay and take your choice

THE VOLUME of public construction in contrast to private building depends upon the community's need and that need is determined by the standard of living. A community may need a swimming pool or another school building but the need cannot always be realized in a "poor" community. The need will also be largely influenced by the prevailing Government's attitude toward its responsibility for providing such things as electric power, irrigation, schools, roads, playgrounds and other public works. The amount of this type of construction even under a free-spending government is regulated by the sums allocated for such other activities as relief and the currently striking example of armament.

It should be remembered that, despite the construction industry's assignment of \$2,500,000,000 for defense, that sum is only one-tenth, or less, of the entire preparedness program. Money spent for relief or bullets cannot be used again for highways or reclamation projects.

It is no wonder then that architects, engineers and builders of large type construction look forward to a time when this country can again afford a \$6,000,000,000 new non-residential and public building program as it did in the late 20's. They are not desirous of building Maginot Lines or Krupp Works which consume rather than increase national wealth. The job of building a defense structure is not one of their own choosing, but confronted with it as the first order of business, they are concentrating on getting the job done as efficiently and quickly as possible.

They are aware of the ominous threat of both war and inflation and that very awareness may help to prevent some of the mistakes and extravagances that followed 1917.

Realists in the industry know that no persuasion is needed to make contractors bid on a \$17,000,000 powder plant at Radford, Va., or a \$13,000,000 cantonment at Camp Shelby, Miss. Even if no patriotic motives were involved, the average builder would probably snap up any such contract available and apply the old time "bird in hand" philosophy. But it is significant that leaders in the industry are constantly warning each other and the public that this emergency public building program is only temporary—that when it is over there will be a relapse unless private construction can take up the slack. They don't believe it will be necessary to go through any such period as 1917-18. Then private industrial building practically ceased under a government decree which ruled that building projects costing more than \$25,000 were non-essential unless needed for war. Today, construction men are preparing for at least a 16 per cent increase over last year in construction of commercial and

manufacturing buildings as well as heavy engineering projects. Some estimates even go as high as a 35 per cent increase.

The building of new industrial plants is a natural field for the immediate development of this private building program. The number of obsolete factory buildings now in use is unbelievable. Except for a few notable examples by large corporations, there has been almost no factory construction since the late 1920's. Technological improvement in production methods has gone forward at a tremendous pace, but comparatively few manufacturers have taken advantage of new developments in factory building. They are using 1940 machinery in 1915 sheds. That is almost as incongruous as it would have been to have asked Abraham Lincoln to administer his job as President of the United States from the log cabin where he was born or, from a construction viewpoint, it resembles building a narrow-gauge railroad to handle traffic coming from a standard-gauge line.

Earl O. Shreve of the General Electric Co. recently pointed out that this country will be in danger of losing its preeminence in modern production methods after the war, no matter which side wins. New buildings and equipment will replace that which has been blown up and, ironically enough, machinery built in this country and shipped to Europe may be used later to wrest trade away from us. If the United States is to compete in a trade war after the present holocaust, it will certainly need the most modern equipment and completely up-to-date factory buildings. It may sound like an extreme statement now but, unless our industry is completely modernized, there is every likelihood that foreign made goods (abetted by cheap labor and modernized factories) such as shoes, textiles, certain types of machinery, processed foods and many other products will be competing with our own goods right in our own stores.

Factory models change, too

THIS POSSIBILITY alone is enough to insure speeding up and enlargement of the private industrial building now under way. Furthermore, new factories will be needed for expanded production to take care of greater purchasing power when defense spending reaches the grass roots in the form of wages. The more alert producers of today are building their new plants as expansions to their present facilities, but in the back of their heads they are carrying the thought that, if recession comes, they can demolish the old buildings and confine their activities to the new.

What is so wonderful about these new factory buildings? Why build them any different than they were in 1915? What do you need besides a roof, walls and floor?

Perhaps the reason will be made evident by the following news story describing a new aviation engine plant in Indianapolis:

In a revolutionary new type of factory without windows, into which no ray of daylight enters and in which the temperature never fluctuates, although most of the heat is supplied by lights, the running of machinery and the body heat of the employees themselves, the new Allison liquid-cooled airplane engine is nearing mass production for

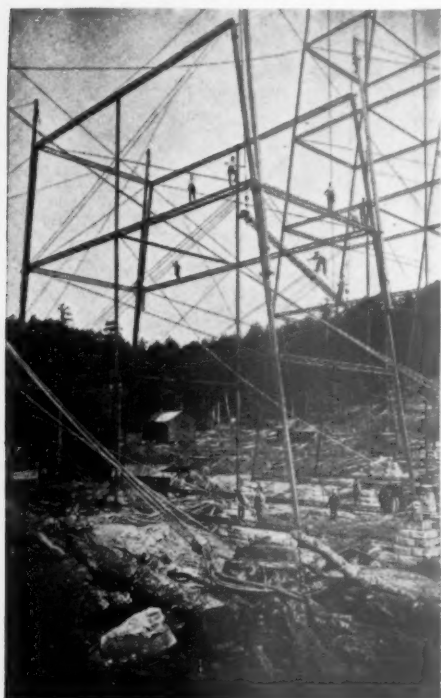
Opportunity in farm building

I am a member of a group of business men investigating building needs of Midwest farms. In this survey we have found that each county in the state of Iowa needs approximately \$1,000,000 merely to rehabilitate our farm buildings. There are 99 counties in Iowa, or an investment of \$99,000,000, which is going to be worth something to industry some of these days.

—Kirk Fox, Editor, *Successful Farming Magazine*



Brick manufacturers are making a concerted drive to interest the farmer in structural clay products. An increasing number of dairy barns, silos, milk sheds, granaries, hog houses and the like are springing up in rural areas.



Bridge construction in the old days. Note hoisting method with gin poles at right center. Also bracing with cables instead of rigid material in use today.

The children lead them

The causes of blight are not difficult to identify. Bad planning and zoning probably must take first place. Excessive areas have been set aside for commercial uses and for multiple dwellings. Traffic hazards are another major cause of blight. As the one-child and two-child family becomes more characteristic of American civilization, the entire family life tends more and more to revolve around the child, and when they can, families will flee from any neighborhood where their children are exposed to the danger of death and mutilation from traffic. Smoke and noise also play their part in creating blight. When blight attacks a neighborhood, there is no question but that its housing facilities deteriorate. Physical decay and slovenliness create conditions that do not make for social health.

—John C. McC. Mowbray, president, The Roland Park Co., Baltimore, Md.

Pay waits on production

It ought to be a truism that the employed worker, who in recent years has been earning on the average around \$1,300 a year, can earn more only if the employer can pay more. And the employer can pay more only as the worker can produce more. But it seems to be a fact which gloomy prophets find hard to grasp.

—E. P. Palmer, past president, Associated General Contractors of America

the air forces of two continents. It is tradition that night shifts in industry are less efficient than day shifts, because men instinctively slow down during the night hours. This is not true at Allison, according to the efficiency experts who are studying the effects of the new type of factory. Temperature and ventilation are absolutely controlled and the lighting, from fluorescent tubes, is the best science has devised, approximating that of a soft sunlight. There is no difference between night and day, and, what is more important, there is no apparent difference in the quality of work or the quantity of work from shift to shift.

There are no windows or skylights of any kind and the roofs are covered with five inches of cork insulation. These conditions make for a type of factory unlike any other yet built. Absolute temperature, humidity and ventilation control make not only for health and comfort of the worker, but also make possible the uniform machining of parts to fine tolerance which could not be obtained if plant temperature varied.

Windowless and atmosphere-controlled plants are the newest and most spectacular developments in modern factory design. They are being recommended for such industries as textile, printing, machine tool, aircraft, automotive and other high-precision metal-working plants where even the moisture from a fingerprint might cause rust and ruin a casting.

Five new acres beat 17 old ones

THE SIMONDS Saw & Steel Company's new plant in Fitchburg, Mass., which has now been in operation more than a year is generally used as the classical example to show the possibilities of this type building. According to a paper prepared by the late W. J. Austin, who built the plant, this company is now producing more in its new five-acre plant, with 805 machines, than it ever could have handled on the 1,703 production units which were distributed over 17½ acres of floor space in its three old plants.

There are only 56 columns in the plant's single room, which is without partitions and has power, water, gas, compressed air and other service lines under the floor for maximum convenience. Circular saws which used to travel 3,280 feet in the old plant, now travel only 1,050 feet. In the old plant they went up and down to four different floors. In the new single-story plant all the operations follow in line. There are no elevators, corners or partitions to impede the flow of materials through the plant, everything is in one room, the walls form a perfect rectangle and the lighting is so uniform that machines requiring special placing near windows in the old plant can now be placed where it is most expedient. The pounding of drop hammers and the grinding whirl of abrasives against steel is lost in the muffled hum of production as the acoustic walls and ceiling cushion all sounds so that undisturbed telephone communications can be made within a few feet of the noisiest machines.

Although only industries where controlled atmospheric conditions are necessary need windowless plants, builders have found other ways of pleasing customers who need new plants but not necessarily the windowless type. When comparing exteriors of these modern, industrial buildings with similar older structures, even an

untrained observer would notice at least two differences. The modern group is lower and more expansive. It has more windows.

The interiors of these modern factories are even more different than the exterior. Chief difference is elimination of many columns which permits speeding up of factory transportation with powered industrial trucks, overhead cranes or conveyor systems. Windows are so numerous that window washing might be temporarily eliminated and the workers would still have more light than can filter through tiny clean windows of the older structures. New side walls of corrosion resisting metals or glass brick are increasingly popular. And word has just been received of a new airplane factory in Texas that will be virtually bombproof. Construction is of steel and concrete which will bend and warp rather than break and entrances are protected by concrete screens to shut out bomb splinters. Such materials have brought their own fireproofing with them, but where contents or operations present fire hazards, tomorrow's workmen and goods will be protected by built-in sprinklers, some of them ready to release a fire smothering torrent if actuated by the heat of a single match held several feet away.

These new type factories are the answer to critics who lampoon the construction industry for failure to keep abreast of technical developments. They are visible evidence that the industry is not only abreast, but far ahead of most of its clients' capacity to absorb the product.

Similar progress is evident in all other branches of large construction. Commercial buildings with improved exterior design and materials; speedy and safe lifting devices; air conditioning; sound proofing; interior decorating; sanitation and indirect lighting are as much different from the old type office building as an automatic desk phone is from the old style contraption that had to be cranked. A little known feature of commercial buildings is their depth underground and the vast networks of varied transportation systems that are built there to service the building.

Even tunnels are streamlined

AS FOR large engineering projects, it hardly seems necessary to call attention to the differences between modern bridges, tunnels and water projects and those built 40 years ago. In tunnel construction, for example, only a few minutes are necessary to clear the air after blasting operations. A few years ago workmen could not enter a tunnel until seven or eight hours after blasting. Men worked with pick and shovel and in short shifts. Today the pick and shovel work is done by huge muckers, machines that look like a combination conveyor and stub nosed steam shovel that remove spoil in carload lots and the men can work full eight-hour shifts. Tunnels, like other construction jobs, may cost more than they once did but, like houses and factories, the customer, generally the taxpayer in this case, is getting far more for his money than he did a few years ago.

Notable engineering jobs that seem worthy of special mention are monthly occasions in the industry but, either because the man-

"Mansions" for \$3,500

A friend of mine has sold 100 houses, equipped with all labor-saving devices—tile bathrooms, automatic heat, modern kitchens, and everything found a year ago in a \$25,000 home—each with a monthly payment of approximately \$45. It is our duty to increase production in our industry and lower costs by seeing to it that every house of \$3,500 or more has all these things that men and women want when they seek new homes.

—Stuart M. Crocker,
General Electric Co.

Low cost projects pay

Arthur W. Binns, realtor of Philadelphia, has achieved wide acclaim for rehabilitating old, run-down houses and making them available for low-income wage earners, mostly colored people. Says Mr. Binns: "The 300 housing units rehabilitated in our experiment have meant a total purchase cost, plus modernization, of between \$1,000 and \$1,500 per dwelling for good, five-room, two-story, brick row dwellings. Rents do not exceed \$4 a room per month. The total investment has resulted in a return in excess of ten per cent net, after depreciation charge of five per cent a year and after paying all city and state taxes. . . . Private capital and private enterprise may yet cause the occasion for government subsidy to disappear."



This bridge at Jamestown, R. I., was erected last year. Apparently resting on thin air, both arms of cantilever main span reach toward each other over 640-foot gap.

Helping labor produce

The improvement in the productive powers of useful labor depend, first upon the improvement in the ability of the workman; and second, upon that machinery with which he works.

—Adam Smith, "The Wealth of Nations"

Robbing Peter to pay Paul

The tenants of government-built housing (U.S.H.A.) are subsidized by being allowed to rent it below cost—the loss thus incurred by Government being paid, of course, with increased taxes levied on the incomes and property of other persons. Therefore, this policy has all the elements of Socialism; government displacement of private individuals and companies as owners and managers of property, and collection of taxes from some of the people to subsidize others of the people with the result, in effect, of reducing incomes of all the former to increase the incomes of the latter—entirely regardless of what incomes the ability and work of any of them entitle them to.

—Samuel O. Dunn, Chairman,
Simmons Boardman Publishing Corporation



He works on a dam in the Rocky Mountains. Minimum wages run from 87 cents to \$1.08 an hour. If he was an Indian working on a dam in India he would get seven cents a day.

agement has not learned the art of ballyhooing its accomplishment or because the job seems commonplace to men who don't flinch at bridging chasms or moving mountains, the public knows little of what builders are actually doing. It is a safe bet that a survey made today would show a large proportion of the public better informed on the accomplishments of the automobile, aviation, rubber, insurance, food processing and cigarette industries than on construction.

A recent example took place near a shipyard on the eastern seaboard when a steel form one-half block long and weighing more than 80 tons was fabricated on shore, moved with derricks and set on pilings where it could be filled with concrete to help build a drydock. Even the hard-boiled contractor who told the story waxed enthusiastic over the vision of this great steel form waving in mid-air, but it never occurred to him to brag about it—it was just another job that had to be done.

However, one spectacular phase of construction will nearly always loosen the tongue of otherwise silent craftsmen. A contractor or engineer who has ever had anything to do with building dams can spin yarns by the hour. To hear them is almost enough to convince a listener that we are living in an age of miracles.

So many magical feats are performed at a modern dam site that it is possible to list only a few of them. The mixing plants are good examples. Each one is a factory in itself and may cost as much as \$1,000,000 to erect. An operator stands in one of them and, by pushing a button, he opens a gate sometimes ten miles away. When that gate moves, it releases the right size and amount of gravel to a moving belt to begin its journey toward the dam site. The belt is operated by short wave radio and so constructed that a jam will not necessarily stop the whole operation.

Some remarkable records have been established at these mixing plants. At Grand Coulee Dam, the contractor placed 20,684 yards in one day or 29 tons every minute for 24 hours. This equals 75 carloads of cement, 225 carloads of sand and 525 carloads of gravel. In October, 1939, enough concrete to build 250 miles of two-lane concrete highway was placed on this same dam.

Quick freezing for mountains

AT THE same site, a coffer dam using sheet steel piling that would have stretched out 151 miles if placed end to end was built to enclose a 60-acre area and every piece of steel was trucked in 30 miles.

Another feat at Grand Coulee was the freezing of a mountain. Sometimes excavating work or extremely wet weather will cause a mountain to slide—not suddenly, but with a slow creep, like lava moving from a volcano. Before this freezing operation was invented, the only remedy was to dig the mud out at a tremendous cost. The engineers at Coulee drove pipes into the moving mud and circulated a freezing brine through them. The mountain froze fast and work on the dam was resumed. The freezing operations cost \$50,000. It would have cost \$200,000 or \$300,000 to have excavated the debris if the mountain had been permitted to slide down into the dam site.

[illegible]

★★

[illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible]



Several years ago the cement industry developed a process for mixing cement with ordinary soil to save costs on construction of secondary roads. Thousands of miles have been built and proven satisfactory. Photo shows cement bags spotted at required spacing in preparation for opening and spreading.

Thinking needs modernization

The average blighted area in America can be safely modernized by new commercial buildings only if the enterprise is based on the possibilities of population growth or stability. In these cases, the investment of new capital should not be thought of as possible unless there has been considerable planning thought given to the enterprise, because what we need most of all is modernization in the thinking about the whole problem of the commercial building as well as in the plumbing fixtures that may go in them.

—Ralph Thomas Walker of Voorhees, Walker, Foley and Smith, New York

How cities grow great

We should have a constant flow of venture capital—for most private capital is venturesome. Thanks to Queen Isabella and the many great entrepreneurs in our history we have built the greatest nation on earth. We can continue to build America only if private enterprise is not handicapped in its desire to take risks and supply venture capital. The reason that one city may be bigger than another is not necessarily due to geographical location, but to the fact that it had a few great men willing to bet their dollars on their own community and make it great.

—George W. West, president, First Federal Savings and Loan Ass'n of Atlanta, and past president of United States Savings and Loan League

being asked to provide 11,500 building mechanics at once in say Corpus Christi, Texas. It would be as easy to find 15,000 chicken-pickers, overnight, for a job in Washington, D. C. And after these armies of workers are assembled, there is the problem of organized labor and union wages. At a small town in Kansas, the Government recently wanted 3,000 or 4,000 carpenters and hundreds of sheet metal workers. There were few in the immediate vicinity and no union men at all. Naturally the contractors sent to Kansas City for help and passenger carloads of mechanics came a-running, but they wouldn't work with the local boys who didn't have union cards.

Union wage for country boys

SINCE the Secretary of Labor has set a wage scale at the rate prevailing in Kansas City for skilled labor in this area, the unions organize the country boys, who suddenly find their wages raised to the same level as their city cousins'. The newspapers squawk, the unions cash in on initiation fees and citizens protest against paying journeymen carpenter wages to many of the new, inexperienced workers who are given skilled craftsmen's rating. In the meantime, the contractor is supposed to act as trouble-shooter, adjust the differences and not lose a day's time unless he wants to forfeit the penalty for failure to finish the cantonment on a given date.

Furthermore, the contractor on cantonment jobs must work under stringent contractual obligations that are bound up with yards of red tape and complicated by unpredictable moves. Thus one contractor was asked to put up a soldier city in Leon, Iowa. When he had started to assemble his equipment it was decided to move the camp to Lineville, Iowa. The Government then found something wrong with that site and the camp was finally moved to Rolla, Mo. It's rather difficult for a contractor to estimate his costs under such conditions. Some criticism is also leveled at the fixed-fee system whereby the contractor agrees to erect a cantonment for a flat fee. It works like this. Say an ordinary single barracks costs about \$8,000. The Government agrees to pay the contractor \$240 or three per cent of the cost, for construction. If changes in specifications or other conditions raise the cost to \$12,000, the contractor still gets only \$240. Under the old cost-plus system he would have obtained an additional three per cent for the extra \$4,000 cost, but under the fixed-fee plan he obtains no additional compensation unless it is decided to build a larger camp. In that case he would receive extra compensation for the additional buildings, but at the same \$240 rate. The fixed-fee system is only used when it is impossible to make competitive bids due to the Government's uncertainty as to exact location or size of the cantonment. And even under the competitive bid system, his profit must not exceed six per cent. There are few business men who would think that six per cent was an exorbitant profit under any circumstances.

Some folks might challenge the ability of construction men to handle management problems and point to the newspaper headlines that scream about jurisdictional strikes. The truth is that, since August, 1939, almost no stoppages lasting more than a day or two

have been caused by disputes between the unions affiliated with the Building Trades Branch of the A. F. of L. The public has been misled by newspaper articles that play up the beginning of a strike but give little prominence to its speedy settlement. Disputes between A. F. of L. and C.I.O. unions seeking a foothold in the building trades have also been falsely played up as jurisdictional quarrels among the old established unions. However, the Associated General Contractors and unions got together in 1939 and worked out machinery for adjudication of jurisdictional disputes which authorizes spot decisions by the president of the A. F. of L. Building and Construction Trades Department and appointment of a referee with power to make final decisions in case of appeal. Since this arrangement was made, stoppages of work due to actual jurisdictional disputes have become rare.

There is one thorn sticking in the craw of the construction industry that its managers would like to see plucked out. That thorn is lettered W.P.A. Opinions differ among men in the industry as to the benefits they may or may not have derived from government help in the past six or seven years. Some maintain that F.H.A. and the Federal Home Loan Bank's contribution to the housing situation have been prime factors in creating the present favorable situation in residential building. Many others fear that the 19 government departments concerned with construction will eventually metamorphose into 19 octopcean tentacles to reach out and strangle the industry in a socialistic embrace.

Regardless of their feelings on various phases of government influence on construction, they are practically unanimous that W.P.A. ought to be shackled before it becomes a government monopoly.

New rules every deal

AMONG the most annoying features of W.P.A. are its persistence and a tendency to raise the ante every time a hand is dealt. For example, \$6,000,000 out of a \$40,000,000 C.A.A. appropriation was dealt out to W.P.A. to build C.A.A. airports. But the W.P.A.'ers got it up to \$10,000,000 and they probably expect to get more.

As an example of the work being done by W.P.A. that ought to be done by private contractors and as proof that it is being done today when relief rolls are supposed to be shrinking, John P. Coyne, president of the Building and Construction Trades Department of the A. F. of L., submitted the following report of W.P.A. projects under way on an air base at Tampa, Fla.:

- All clearing and grading at base.
- All drainage on base.
- All rough grading on runway and hangar sites.
- All tunnels and concrete work for electrical night lighting system on base—also, laying of electric cables on this job under supervision of contractor.
- Complete construction and erection (including carpentering, electrical, plumbing, concrete work and heating installation and painting) of approximately 25 barracks and office buildings; also three large warehouses at base.
- Complete construction and erection of three large concrete garages.

"Blight" worse than slums

The problem of American cities is not slums. It is something much more difficult to overcome. For want of a better name we call it "blight." A blighted area is one where the owners have lost interest in maintaining their properties in good condition. It is an area where the individual owner feels that the recession of the entire neighborhood does not justify him in trying to stem the tide alone. It is this creeping blight which is causing the exodus to suburbs on the part of all those who can afford to get away from the areas affected. Blight means declining neighborhood morals. It is the cause of sagging real estate values. It is a unique American problem which cannot be met by imported formulas from abroad.

—John C. McC. Mowbray, president,
The Roland Park Co., Baltimore, Md.

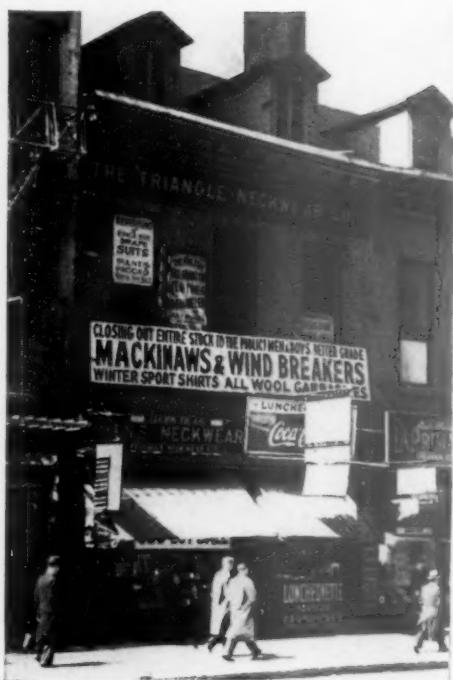


Insulating materials of many varieties are one of most striking developments in past 15 years. Help to cut labor and fuel costs—add to comfort in summer.

Goal for the future

It is not necessary to depend upon existing boulevards to carry motor traffic through the heart of a city when elevated highways are built. Such highways can run down alleys, over houses, and can make use of railway rights-of-way. Where the necessary titles can be cleared, a great convenience to motorists could be provided in elevated highways following the rail lines already piercing some of our cities.

—V. G. Iden, Secretary,
American Institute of Steel Construction



What to do with decaying business sections is a number one problem to investment and construction men. Plans are under way whereby they will attempt to build complete new neighborhoods in these blighted areas.

Installation of temporary electric power lines throughout the base, wherever needed.

Will build approximately 90 more buildings at base, and do all work except electrical, plumbing and heating installation—part of \$600,000 contract.

Build all roads on base, and have obtained \$500,000 project for two roads leading to base.

Have approximately 3,500 to 4,000 men now at work on base.

Like business men in any other industry, employers in the construction field are wondering what will happen to their business and their workers when peace is finally declared. Regardless of the outcome, most of them believe that the job of replanning and rebuilding our cities will make their industry indispensable, and their product most sought for, in a stricken world seeking to gain its equilibrium.

Holland offers an example of what a country may do when a war among the neighbors disrupts its own business. Her principal business had been international trade, but the last war and the resulting trade barriers had hemmed her in. A great merchant fleet was rusting in the harbors. So Holland rebuilt her country. In 1919 there were 1,380,000 houses in Holland. Between 1919 and 1934 they added 658,000, or almost 50 per cent.

Cities need new dress

IN THE United States an even bigger job needs to be done. Millions of houses are needed. Thousands of obsolete factories, stores and office buildings demand replacement. But replanning and rebuilding of our cities and highways to meet the demands for business and recreation of a people on wheels is a task that might startle the imagination of Jules Verne.

Our cities have increased their potential area of urbanization about 15 times in the past 30 years and have left blighted areas that comprise as much as one-third of the old cities. They are peppered with decayed spots from the core to the edges. The very hearts of some cities which were hubs of activity 35, 50 or 75 years ago are now almost ghostly compared to their former brilliance and streets that were inadequate for horse-drawn traffic in those days are now more than ample for the limited amount of motor traffic needed to service the district.

In one downtown business district a recent study revealed that the aggregate market value, estimated on the basis of sales, had decreased from \$156,200,000 in 1914 to \$61,600,000 in 1939. In this same period, the aggregate assessed valuations of property in this district had decreased from \$136,496,000 to \$97,757,800. Certainly the city government and other taxpayers in the city, as well as the owners of this central property, are affected adversely by such depreciation.

Everyone knows the situation regarding tenement housing in cities and the necessity for providing adequate shelter for the low-income groups who inhabit these squalid sectors. Every city dweller also knows that sections of his town which now seem habitable are

on the way to becoming slums within another generation if their decay remains unchecked. Every automobile driver is aware of congestion problems in business districts that can only be remedied by rebuilding and replanning.

What can be done about these seemingly impossible situations? Obviously, these old buildings and entire sections of cities cannot be towed out to sea and dumped, nor can they be sold for junk. Tenements cannot be razed overnight and their occupants put in tent cities. People with automobiles are not going to throw them away because they can't get parking space in a crowded downtown area.

Research without test tubes

BUSINESS men connected with all phases of the construction industry, like the modern enterpriser in all other progressive industries, have called in the research men. Plans for rebuilding our cities haven't reached the blueprint stage, but neither was nylon or the radio or Rockefeller Center developed without painstaking research, experimentation and development. Studies are being made, experiments are under way and some good samples already in existence indicate how the problems of rebuilding may be solved.

The majority of business men agree that one experiment has gone far enough. They do not believe that the housing problem in large cities can be solved by federal government expenditures for new buildings. At best, large-scale housing projects of U.S.H.A. serve only to demonstrate one method of approaching the problem. At the worst they will kill off local initiative which is needed if our cities are going to have their faces lifted.

No public-spirited citizens have any quarrel with the federal public housing objective of eliminating bad housing. But there are objections to the methods the federal Government uses. Realtors grant that they have found no way properly to house income groups in the \$1,200 class or lower, but they suggest that a better method than providing subsidized new housing for them would be to subsidize their rent payments. Rental aid is not proposed as an alternative to public housing, but as part of a comprehensive program that would include the whole community. That program would include modernization of old houses and rehabilitation of blighted areas to make them suitable for the low-income groups. Those who need rent assistance need not, and preferably should not, live in government-owned dwellings. It isn't an equitable or safe practice to provide better homes at taxpayers' expense for \$1,200 income groups, when the \$2,500 group is not only paying its own way, but is forced to live in less acceptable quarters than the subsidized \$1,200 group.

The United States Housing Administrator has said that a maximum of 15 per cent of the population would have to be rehoused to do the complete public housing job. This would mean new housing for 4,500,000 families and, at the present average cost of U.S.H.A. projects, would cost some \$20,000,000,000. Obviously such a huge expenditure is beyond realization, unless we are going completely socialistic or totalitarian.

Challenge to business men

I do not believe our business men, chambers of commerce, investment groups, civic organizations and public officials have become so sterile or oblivious of the basic welfare of their communities that they cannot organize to deal effectively with this problem of downtown business districts. We are individually willing to accept an impossible situation hoping, each by himself, to escape total consequences through some fortuitous circumstance.

—Harland Bartholomew, city planner,
St. Louis, Mo.



When nearly everyone used a common carrier, pedestrians alone created the most congestion—today's greatest traffic puzzle is not the pedestrian, but his automobile.

Civilization demands cities

There has been much talk of decentralization and advantages that accrue from it, but modern civilization demands cities. Our country cannot afford to see wasted a substantial percentage of the great wealth in buildings or the large capital investment in business that is represented in our large central business and residential areas.

—Walter S. Schmidt, president,
Urban Land Institute

A new profession beckons

Many institutions need professional real estate management; and servicing of properties outside the present field of management is beginning to open up as a new management activity. Maintenance of physical buildings, supplies, lawns, equipment, cleaning and decorating problems by trained professional men leaves the organization free to handle its other affairs. Members of our institute are already serving hospitals, schools, churches, airports and golf courses. There is much property that needs to be managed that is not presently in the hands of skilled managers.

—Kendall Cady, secretary, Downs, Mohl & Co.,
Chicago property management organization



BETTMAN ARCHIVES

Road construction under way in a St. Paul suburb in the late 1890's. Most praiseworthy employees were those who could get most out of horses without abusing them.

What then, if neither business nor government can do this complete rebuilding job of both downtown and residential areas, is the answer?

What is called for is the creation of a new neighborhood unit, economically sound and socially desirable, to take the place of worn-out areas. On its own, private enterprise can do little more than spot rehabilitation. Ownership is too diffused and holdings too scattered to make possible the large-scale, contiguous block rehabilitation which alone can be effective. Planning control by the municipal government is also essential if a neighborhood character is to be established and maintained. The single block is too small a unit to protect the individual building and areas must be dealt with on a neighborhood basis. Rebuilding on any scale approximating the size of the problem is out of the question for financial reasons.

But suppose that a City Planning Commission in association with experts of cooperating banks, insurance companies and other private investment interests, would develop a plan for rebuilding the entire area with perhaps some of the adjoining districts as well. Such a plan would designate the sections which appeared most suitable for business—wholesale, retail or both; other sections which might be rebuilt successfully with high-price apartments; others for medium rental residences and still others where housing for low-income families would be built. The city would contribute comprehensive planning such as traffic arteries, parks and play spaces, protective zoning.

This type planning is not ethereal. In this day of advanced management and organization it is both possible and practical. There is one great drawback and that is the difficulty in assembling the necessary land tracts. But even that problem is on the way toward solution. In New York, Illinois and Michigan, legislation now shaping up will permit the organization of companies similar to public utility corporations that will have the right of eminent domain. These companies will have state power to condemn and buy the land and property necessary when it is thought advisable to rehabilitate a city's blighted area. Together with that power they are asking that the tax valuation in the area to be rehabilitated remain at its present assessment for a period of ten years to give the project a chance to become a going concern.

Tax vacation means revenue later

SIMILAR concessions are often made to bankrupt properties in process of rejuvenation. Instead of immediately raising taxes on the basis of estimated capital appreciation, the city gives the corporation the opportunity to prove its earning power and to make a start toward amortizing its indebtedness before putting tax increases into effect.

The ability of private enterprise to organize, build and manage the large-scale operations necessary in any plan of this type has already been proven. One prominent example is the Metropolitan Insurance Company's Parkchester development in the Bronx, New York City. It is the largest single-rental housing project in the coun-

try. It will cover 129 acres; will include 51 apartment houses with garages, five theaters, two store buildings and a central heating plant, a total of 59 buildings; is roughly estimated to cost \$65,000,000; and is planned to accommodate 12,269 families in suites of varying sizes.

Another older example with more than a decade of history behind it to prove its soundness is Chatham Village in Pittsburgh. Its success today indicates that the large-scale planned community, socially integrated and controlled, held in a single ownership over a period of years, will be secure from many of the perils of invasion that beset the ordinary district of single family homes. If the districts are large enough and wisely administered they can be maintained against neighborhood depreciation regardless of what may happen in other parts of the city. They do not become obsolete and can always be counted on as taxpaying, civic assets.

The great parking space mystery

WHEN considering the modernization of cities, it is impossible to neglect the automobile influence. It has brought problems of congestion and decentralization that will continue to have increasingly important effects on the construction industry. A satisfactory method for parking cars is still a mystery. Must separate space be provided for them either on vacant lots or within buildings specially constructed for that purpose? In some cities new business buildings are no longer placed at intersections, but away from the corner and the expensive corner land is devoted to a terminal for the automobiles. In other cities drive-in markets and suburban branches of downtown stores are drawing some of the downtown traffic to less congested areas.

A few years ago an effort was made to solve the embarrassment of central areas by spectacular street and highway programs which funnelled all the traffic into commercial centers in record time, but that only increased the parking troubles. When people used common carriers exclusively to bring them into downtown areas there were few terminal problems. But today the capacity of a business district is measured in terms of automobiles in ever increasing degree. Majority opinion is that cities must have this central district where most of the people do business.

That leaves the planners with two great tasks on their hands. They must provide terminal facilities for automobiles and thoroughfares must be created and maintained for moving vehicles. Express highways, either elevated or depressed, seem to offer the best solution for moving traffic, but the terminal problem is far from solution. In any case there is a big job ahead for construction whenever this country cuts its pattern to fit the desires of John Citizen who wants to go to work and to market in his own automobile.

Highway builders and material suppliers also perked up their ears a year or two ago when highway authorities outlined long range plans which have been estimated to involve a \$50,000,000,000 expenditure over a 20-year period. This sum was intended exclusively for new construction, including rights-of-way, and to be di-



EWING GALLOWAY

The development of modern highways is really in its infancy—Within 10 or 15 years this typical example of fine construction may well be as obsolete as the highway they are building in picture on opposite page.

Dobbin could hold his own

Many cities are witnessing traffic moving in their central business districts at speeds of five and six miles an hour—a speed no greater than was the movement of horse-drawn vehicles before the coming of the automobile. This congestion is having a serious effect upon the whole processes of construction, building and planning within every city in the United States.

—Dr. Miller McClintock, director, Bureau for Traffic Research, Yale University

Code makers go wild

I have maintained for years that a building code is a glorified specification and is an insult to the intelligence of the American people. I can cite you instance after instance of building codes written far beyond the intent of the law, and the intent of the law was the police power to protect the safety and health of the occupants of the building.

—Walter R. McCornack, Dean, School of Architecture, Massachusetts Institute of Technology



New York's west side elevated highway, here shown under construction, is hailed as the forerunner of many another that will alleviate traffic congestion.

No freedom without property

Why is our system of enterprise free? It is a free system because it is a private system. The reason for this is simple. Men cannot possess freedom without the means to defend it. The only way that I know by which the ordinary citizen can defend his freedom is through his right to own property, whether that is a home, an insurance policy, stocks or bonds, a savings account, a farm or a business. Take that right away from Mr. Average Citizen and he is at the mercy of his Government, and that means in practice at the mercy of the people who are running it.

—E. P. Palmer, past president,
Associated General Contractors of America

vided between major rural highways and main arteries in cities. Such a program would more than double the amount now being used on similar construction.

This program has been temporarily altered by a switch-over to the Government's demand that highway construction and maintenance should be centered on preparedness needs. The defense road map includes 75,000 miles, 30,000 of which are main arteries. On this main road network are about 2,000 bridges that need altering and 14,000 miles of pavement that need strengthening because they will not carry heavy loads needed for military purposes. In addition, several thousand miles of access roads to and within military reservations and industrial sites are needed to complete the military requirements according to John M. Carmody, Federal Works Administrator.

You are the boss

WHEN the highway program is added to the building program for 1941 or for the next 20 years, it would seem that men in the construction industry should have no cause for jitters, provided of course that the world does not go completely topsy-turvy and, even if effects of the European war should shake us to pieces, it will be necessary to put those pieces back together.

Even if there had been no war the United States was set for rebuilding. Cities must be rebuilt to meet the demands of a more "fluid" population. Factories and office buildings have become obsolete and will be replaced by buildings to take advantage of such new developments as air-conditioning, indirect lighting, columnless structure and other new improvements. The demand for buildings by such new industries as chemical manufacturing, rayon, aviation and others now in infancy may even surpass the demands already made by the automobile and steel industries.

New housing units at the rate of 600,000 a year for a long period will be needed. The possibilities are so great and the volume so far beyond ordinary comprehension that, in its preparation for meeting the job ahead, the construction industry will likely modernize itself into a structure that would be unrecognizable to the men who built the Woolworth Building, Keokuk Dam, the Lincoln Highway and reconstructed San Francisco.

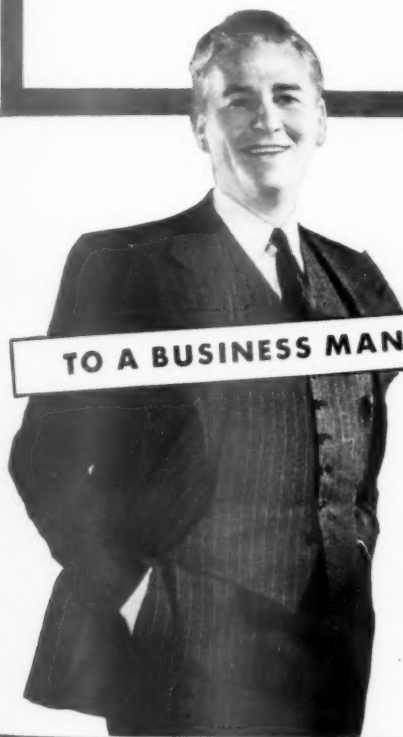
Confidence that construction leaders can do their share in rebuilding the face of the United States is quickly gained after interviews with leading members of the fraternity. Most reassuring symptom is their willingness to admit past errors or charges of delinquency in some of their present operations. But, while they may be admitting their shortcomings to an interviewer in the front office, it is almost a 100 to one bet that, in the work room or in the laboratory or out on the site, their representatives are conscientiously going about the job of eliminating those shortcomings. The sand, brick, lumber, cement, steel, equipment and workers are on the site. The job of rebuilding in the United States waits only the command of the owner—John Q. Public himself.



TO AN ARMY PILOT

**"DODO" means a cadet
who hasn't soloed**

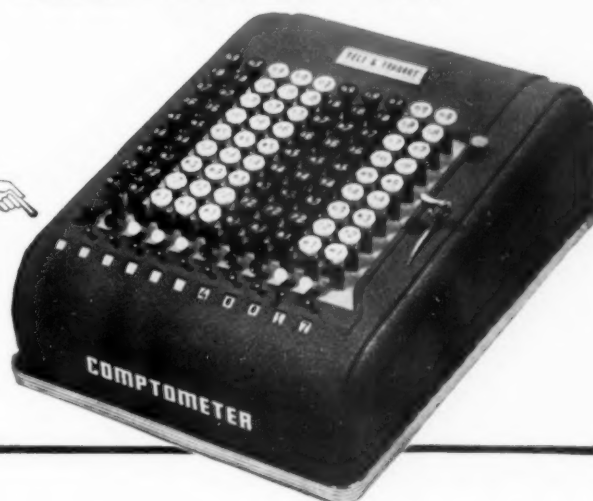
In the jargon of Army flying men, cadets who haven't yet made a solo flight are called "dodos"—after the large, extinct, non-flying bird.



TO A BUSINESS MAN

**"COMPTOMETER ECONOMY" means
FIGURES WHILE THEY'RE "HOT"**

NO CIPHERS appear on the Model M answer dials unless they are part of actual answer! The answer, for example, used to read 00000040017. Now it reads 40017.



TODAY, time is *more* than money—it's national security! No wonder, then, that Comptometer adding-calculating machines and modern Comptometer methods are finding greater favor than ever with the leaders of America's business and industry.

They know that Comptometer machines and methods combine *high speed* in handling vital figure

work with remarkable *first-time accuracy* (thanks to easier read answer dials, and the exclusive Controlled-Key safeguard, which eliminates operating errors).

They know Comptometer machines and methods are *adaptable* to specific figure-work problems—simple or complex.

May a Comptometer Co. representative show you, in your own

office, on your own work, why "Comptometer Economy" means more figure work in less time at lower cost? Telephone him—or, if you prefer, write to Felt & Tarrant Mfg. Co., 1712 N. Paulina St., Chicago, Ill.

COMPTOMETER

REG. U. S. PAT. OFF.

ADDING-CALCULATING MACHINES



Washington



and 
Your Business



Bugles Sounding on Capitol Hill

THIS is not a guarantee. Too many dice with funny spots on them are rolling out of the box. But people on Capitol Hill who usually know the score think we will begin an aggressive defense of Britain now that the give-away bill has been signed. During the argument most of the veils were torn off and the bill appeared as a device by which the President can do whatever he wants to do to save Britain. His words and gestures suggest that he proposes to save Britain at any cost. Once we are in the war we are all the way in, of course. These statements are made in no spirit of criticism but merely as an endeavor to make the position clear.

Destroyers and Cruisers First

THE Navy is yelling for more destroyers and more light cruisers. If Britain really wishes to trade a pair of new battleships for a squadron of light craft the Navy would be receptive because admirals love battleships. Present theory is that Britain's need for convoy vessels is so great that our destroyers may be loaned for that purpose, on the promise that they will be restored to the battle line if need be, and that Britain may lend us battleships in return. The Army is not happy about the possibility of garrisoning any eastern islands until its rookies have at least learned from which end of the Garand rifle the fire comes. The Maritime Commission has no cargo ships to spare, but cargo ships must be found.

Mothers Please Pipe Down

AT the risk of infuriating American womanhood the report is reluctantly made that most of the boys who are being inducted into the Selective Service—in a cruder age we would call them conscripts and be done with it—are leaping at the chance to get away from home. Representative report from district boards, as relayed through various members:

"These kids aren't soft. Any one who says they are has a knuckle in his brain. Mothers are forever coming into the board rooms demanding that their pet sons be saved from contact with young men who sweat under the arms. The young fellers whisper: 'Listen, Mister. Pay no attention to what Ma says. I want to get away.'"

Congress in a Hair Shirt

UNHAPPINESS seems to be spreading in Congress like green mould on a cheese. In the latter days of the fight on the give-away bill, the percentage of letters in opposition increased and the heart throbs of their writers quickened. Congress began to look on the bill as a capsule stuffed with cyanide. Many things are certain to happen and some are bound to be unpleasant. It is true that the volume of letters fell off toward the end of the fight. This is a large country and a good many of its citizens only get in touch with public opinion when they go to the store and then they take several days to translate news into views. Many congressmen wonder what they will say to the folks back home if the "Killed in Action" lists begin to appear on the first pages.

Supreme Court is Seasoning

LAWYERS whose business it is to watch the Supreme Court report this high body is beginning to season. They say that, whenever a new member who has had a background of pinkishness comes to it, he has a period of being obstreperous. He wants to make it clear that he is a Force. Little by little the atmosphere gets him. He begins to see that his fellow members are not moved by political animus or personal likes and that the one thing they reverence is the spirit of law. The new man ceases to be an advocate and becomes a judge.

Miss Perkins Overruled

NOT as an example of this soberizing influence of the High Court, but merely as a possible excuse for a chuckle, the incident of Miss Perkins on Hats may be related. She is the Department of Labor, she is regarded as impervious to the call of beauty and in her hatting she is robustly sensible. She recently observed that the business of making women's hats could be placed on a more stable foundation if manufacturers could agree on a few standard models instead of purveying crippled absurdities to the trade. Then an organization of hat makers moved along a parallel line and tried to protect their creations from copyists and the court said unanimously that they were attempting to restrain trade and must stop. Justice Hugo L. Black wrote the opinion. A year or so ago one would have said that Justice Black and Secretary Perkins would think through the same quill.

Three Jacks and a Bowie Knife

IT was just an unfortunate chance that the labor racketeers were given a helping hand by the Supreme Court in the Hutcheson case. Thurman Arnold, assistant attorney general, has remarked that the decision in this court:

Impaired or destroyed the right of workers in any particular plant to set up unions of their own choice. Once a union is forced on the employees by the victors in a jurisdictional controversy they have no power of effective protest against arbitrary dues, unfavorable wage contracts or arbitrary leadership since they will not be permitted to join another union.

Mr. Arnold dropped indictments against unions

NATION'S BUSINESS for April, 1941



New and enlarged plant of North American Aviation, Inc., Inglewood, Calif. Austin has been awarded several repeat contracts aggregating 1,000,000 sq. ft. of floor space.

Organized Nationally

...to speed defense



From Puget Sound to Long Island Sound, acres of floor space are being added to American Defense facilities *with more yet to come*. Constantly increasing is the demand for countless products . . . from 70 ton bombers to tiny radio parts . . . from 5,000 ton hydraulic presses to delicate precision instruments.

But before more men and machines can be put to work to increase output, many modern plants must be designed and built. These plants must be built *quickly* and in *more locations* than ever before in any previous emergency.

In such a picture the Austin Organization can serve industry to excellent advantage. It is a known fact . . . concentrate responsibility and you speed results . . . divide responsibility and you delay results. The Austin Method of Undivided Responsibility has been *saving weeks* for production by speed in construction for many years. Reason: one organization, under one contract, is responsible for building layout, design and construction.

Since this demand for more floor space in a hurry is nationwide, industry in all parts of the country is employing the Austin Method because it is available through 12 strategically located offices from Coast to Coast—each long established and each having an intimate knowledge of local conditions. Austin will gladly offer suggested designs and cost estimates promptly and without obligation.

THE AUSTIN COMPANY • DESIGNERS • ENGINEERS • BUILDERS

16112 EUCLID AVE.



CLEVELAND, OHIO

NEW YORK
PHILADELPHIA
PITTSBURGH

CLEVELAND
DETROIT
INDIANAPOLIS

CHICAGO
ST. LOUIS
HOUSTON

SEATTLE
OAKLAND
LOS ANGELES



Unusual projects sometimes take Austin men "off the beaten path." Picture taken in front of Austin Field Office shows that even the virgin territory of Puget Sound is being invaded to provide new plant facilities for National Defense.

Progress view at the Boeing Aircraft Co.'s Plant at Seattle, shows placing of last segment of a large truss, each weighing 100 tons, to provide a clear span of 300 ft. for assembly of large bombers. This last unit brings the total to 41 acres of floor space, designed and erected by Austin at Seattle.

A "Controlled Conditions" Plant on Long Island which automatically becomes a "Blackout" Plant for aircraft production. Project containing 480,000 sq. ft., designed and erected by Austin, provides uniform working and operating conditions, 24 hours a day, winter or summer, day or night.



that had been beating up members of rival unions and so obtaining control of industries. Under the decision of the Court the racketeers had an Arkansas flush—three jacks and a bowie knife.

Peace Reigns in N. L. R. B.

SINCE Dr. H. A. Millis replaced Madden on the Labor Board fewer criticisms of its operations have been registered. Millis and Leiserson, both experienced in mediation, have been working together in harmony and Third Member Smith joins them frequently. Observers maintain this new peace is an added proof that the law should be made more definite and precise, as a safeguard against a relapse into its former autocracy in the event of a change in the Board.

Harping on a Muted String

UNDERSTANDING in Washington is that, when the give-away bill becomes a law, the Administration plan is to order things done without making songs about it. The business of supplying Britain's wants is swelling into a larger proposition than any one suspected a little while ago. More and more will be asked of industry, because the belief in the high circles is that the war promises to last for at least two years more. But the new dictates will be slipped out a little at a time, unobtrusively, almost surreptitiously.

Already senators who have always in the past been able to get information from government departments promptly are complaining they are not getting it at all.

Forget About New Models

PEACETIME wants will give way to wartime needs:

"Does this mean the automobile manufacturers will not get out new models?" was asked of Boss Knudsen of the O.P.M.

"You've bought old models before and you didn't know anything about it," said he.

Consumer Goods Free as Yet

FOR the time being consumer goods—clothes, groceries, shoes, house paints and the like—will not be interfered with. Presently there will be talk that it is "disloyal" to buy too many new suits or have the old car's face lifted. The theory is that when we "get into the war" we will go short gladly. New taxes are already being promoted. The President seems to have set his face against a general sales tax, and favors placing a heavier burden on the middle classes. The limit of taxation has been about reached on the higher incomes, say the experts, and the low income man has a great many votes and is astoundingly vocal. Investment bankers expect to benefit by the elimination of tax-free bonds. They think this money will go into business investment.

Straw Shows a Wind Blowing

CENSUS reports on the book publishing business in 1939 show a stirring in the national mind. Books of fiction fell off about one-half from 1937. People had been fed up on fiction. People wanted to know what had happened in the past and so history books almost doubled in number. They doubted what they read and reference books doubled also. They did not like what they found out and the output of Bibles and parts of Bibles increased by 2,000,000. Consolation.

Standard Wages May be on the Way

IN 1918 desperate employers sacked each other's plants to get the men they needed. Bernard Baruch says that wage standardization was not far off when the Armistice was signed. There was a possibility that workmen would be held on the job by order for the production program was being shot to pieces. Consideration is being given today to a similar set of facts. The industrial program ahead will be greater than in 1918, if this country is to become the universal provider. The O.P.M. has already issued a warning to employers to "refrain from recruitment efforts outside your own locality."

Good Works at Long Range

THE captain in the new A.E.F. used old-fashioned language when he came in:

"Home on leave," said he, "and I find my sister knitting sweaters for 'Bundles for Britain.'"

"What's wrong with that?"

"What's wrong is that I have a company of city boys down in the Kentucky mountains, and they like to shake their shoulders off when they turn out to drill these frosty mornings. Not a sweater in a car-load."

Might Save Some Lives

THAT plane in which Eddie Rickenbacker crashed had been cruising around trying to find the landing field in a fog. It got too low—

Army has tested and approved a device for blind landing. The C.A.A. has approved it, too. But no one has acted. Governments move slowly.

A little more speed and a bit less exhortation might be of use in departmental circles.

Mrs. Roosevelt's a Guiding Star

THE smart ones around Washington are paying more and more attention to what Mrs. Roosevelt says and does. Eight years have shown that she has an enormous influence with the President. More than that, the things she says today are likely to be done by the Administration tomorrow. Even if they are not done, what she says shows what other important folk are thinking. Big-shot speculators play trends.

Plant Expansion to be a Policy

THE Administration is convinced that the existing industrial facilities will not be equal to wartime needs and that when the "short of war" screen is knocked over present plants must be greatly expanded. Manufacturers who are hard-hearted about this will be controlled by the priority whip. Government money will be fed in as the occasion demands, and a scheme which is as yet more or less vague is being worked out for government share-cropping when the emergency ends. By means of outright gifts and long-term amortization combined with the promise of continuing government orders under some form of government control, manufacturers will be relieved of much of the threatened burden. This plan is only in the egg as yet. But the expansion of plants seems a certainty.

My, My, How the Money Rolls Out

HERE is a chance to use a little scholarly language: "William L. Batt envisages the possibility"—said

AGAIN CHEVROLET'S THE LEADER!

You'll want all these
features to get the
**BEST RIDE
AND DRIVE!**

*and Chevrolet is the only
low-priced car that has all of them*

ORIGINAL VACUUM POWER SHIFT

*AT NO EXTRA
COST*

Built as only Chevrolet
builds it. 80% automatic,
requiring only 20% driver
effort.



UNITIZED KNEE- ACTION

—with balanced springing
front and rear, and im-
proved shockproof steer-
ing.



90·H.P. VALVE·IN· HEAD ENGINE

First in acceleration—first
in hill-climbing—among all
biggest-selling low-priced
cars.



BODY BY FISHER

*WITH UNISTEEL
CONSTRUCTION*

AND TURRET TOP
Concealed Safety-Steps
at each door. "3-couple
roominess" in all sedan
models.



You'll Say "FIRST BECAUSE IT'S FINEST!"

CHEVROLET MOTOR DIVISION, General Motors Sales Corporation, DETROIT, MICHIGAN

an Administration chief—"that in certain contingencies we might be compelled to raise for defense purposes \$20,000,000,000 to \$30,000,000,000 a year for defense purposes."

Batt is a sound business man—S.K.F.—with a substantial record of achievement. As a deputy chief of production in the O.P.M., it may be presumed that he reflects what those upstairs are thinking. He made this alarming prediction to a meeting of Swarthmore alumni.

Censorship in Near Future

IF and when we go to war, a military censorship will be clamped down pronto. Not many will object to that. Sailing dates, army movements, plane production figures and other items of the sort are valuable to the enemy. Lowell Mellett is the guessers' pick for chief censor. He is emphatic in declaring that no civil censorship will be ordered. Three will get you eight, though, that newspapers and radio speakers will be asked to conform voluntarily. There's an "or else" in the closet.

Walter Bill is Coming Through

THOSE in close touch say that what began as the Walter-Logan bill will be enacted in some form by this Congress. This is the bill which sought to curb the autocracy of the various bureaus and which was killed by administration opposition in 1940. Three bills are in the hopper, each differing in detail from the others, but each offering relief from a condition which has at last been understood by the public to be intolerable.

O. R. McGuire, chairman of the American Bar Association's committee which was responsible for opening up the situation believes a satisfactory compromise will be worked out.

Anyone Can Hear These Stories

PAVEMENT talk is that most of the heads in the defense set-up are angry, baffled, liverish and full of frustration, and will resign next week. Some of the stories are true. Most of them are cracker crumbs. There has been friction, conflicting ambitions, misunderstood statements and amateur interference. In radio circles they call amateurs "hams." All that could have been expected.

An enormous machine is being thrown together hurriedly. No overall plan had been prepared, Johnson's plans for production were forgotten, and there was not even a schedule of the combined needs of this country and Britain. The machine has been squeaking. But any one who thinks the American business man is not making good on this national job is purely foolish. He could do better if he had been given sound direction.

Labor Troubles in Democracies

IN no other country could Philip Murray say what he said to the C.I.O. and get away with it. Murray has always been regarded as a level-headed man. He has fought employers but they have always looked on him as essentially fair. Yet he took the earnings of a few large corporations and made a horrifying picture out of it. One was reminded of W. J. Bryan's first step toward fame:

You shall not crucify Labor on a Cross of Gold.

Murray was unfair and provocative and spoke just

as strikes in defense plants were causing Boss Knudsen an infinite number of wrinkles.

"Every hour lost is material lost," said that worried man.

But that's the way things are done in democracies. Those who think Mr. Murray should be cracked down on should try the ice pack method. It often works. In any case, if Knudsen's co-boss, Sidney Hillman, is quoting the right figures, strikes have not slackened production greatly. Too much, of course. But only a fraction of a per cent.

Pigs are on Unfair List

DIFFICULTIES of the great thinkers who try to substitute a Wallace formula for the law of supply and demand are noted in the matter of pigs. Britain wants more lard and pork almost savagely. Defense work expansion has taken millions off our relief rolls. A hard worker eats more, especially when he has money with which his wife can buy groceries. But the corn loans being made by the Agricultural Department are so lush that farmers cannot afford to feed corn to pigs. So fewer pigs are being routed into the packing houses.

Just to make a bad matter worse, the orange and blue stamp plan enables a family on relief to buy pork that an ex-reliever back at work cannot afford to buy. So he feels like getting back to the W.P.A. Self-respect will not feed the kids. Maybe a new incantation can be found.

Wall Motto for Law Students

YOUNG men approaching graduation in law schools might pin this fact on the study walls. The S.E.C. keeps an eye on the law schools for promising material.

Youngsters who look as though they might make good have a chance to get a job in one of the departments of the S.E.C. Presently they may be raided out by some other government department or by private business but, in the meantime, they will get an education in corporation law which can hardly be touched anywhere else.

In the eight years of its life, the S.E.C. has been compelled to make seven separate statutes work in the courts, providing all the arguments and discovering what the new precedents will be. Not to be wondered at that its legal staff is top-notch.

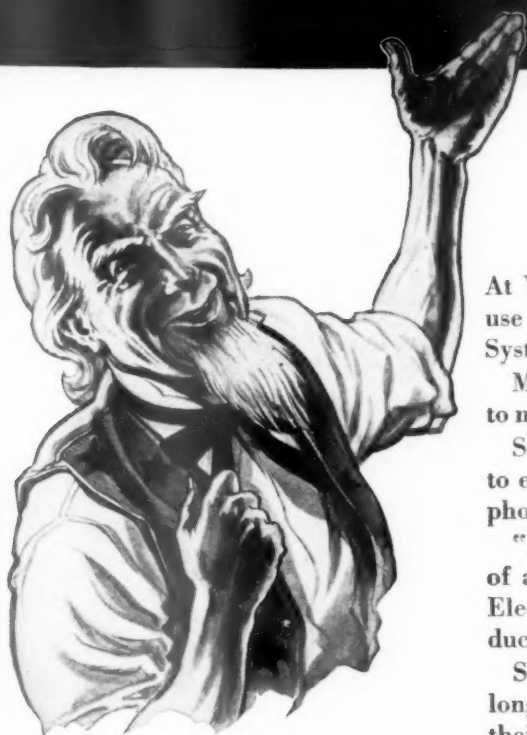
Read 'em and Weep

REPRESENTATIVE Patman of Texas is generally known as the congressman who conducts a one-man cavalcade when chain stores are mentioned. But he did his good deed when the bill for building houses for defense workers was debated in the House. He produced figures which had been offered in evidence before a House committee by Ferguson of the F.H.A.:

"Foreclosure costs run from \$5.18 in Texas to \$354 in Illinois," said he, "and the elapsed time from the date of the petition from eight days in Virginia to 19 months six days in Illinois."

He thought the states might look into these facts. Some might even do something about it.

Herbert Corey



**"and that's good news
for the National Defense!"**

At Western Electric we're producing telephone equipment for use now which normally would not be required for the Bell System's nationwide service for two or more years.

More than a year ago we began to plan for the impending need—to make ready our people, our plants, our machines, our materials.

So we're prepared when a rush order comes from Uncle Sam to equip Camp Edwards or Camp Beauregard with adequate telephone facilities. Thirty million feet of wire? Yes, in a single order.

"More telephones for these new plants," is the urgent demand of aircraft manufacturers and other defense industries. Western Electric's response cuts weeks and even months out of usual production schedules.

So in this time of need, as in calmer days, Western Electric's long experience and manufacturing facilities are demonstrating their worth to the nation.

Western Electric ... is back of your
Bell Telephone service



IF THE American industrial Aladdin is to rub his lamp and produce war materials, somebody needs to protect him from those who want to "help" with the rubbing

Red Tape for Lamp Wicks

By WILLIAM A. McGARRY

A CERTAIN successful firm of management engineers hired a young technical graduate a year ago for office and field work. He did well on several specific shop assignments, largely statistical. Then he was left in charge of the office one Saturday. A customer walked in. He was a small manufacturer who wanted to know if the firm could help him solve a problem in excessive breakage of tools.

The young man had been reading up on tool control and he could talk. As a result, the manufacturer hired him. The young man went to work, asked questions, put down the answers and made friends with everybody. At the end of the week, he told his employer that he thought he'd have the answer by Monday.

"I've been doing a little checking after hours," he said, "and I'd like to have two men work overtime this afternoon and tonight. The results will speak for themselves."

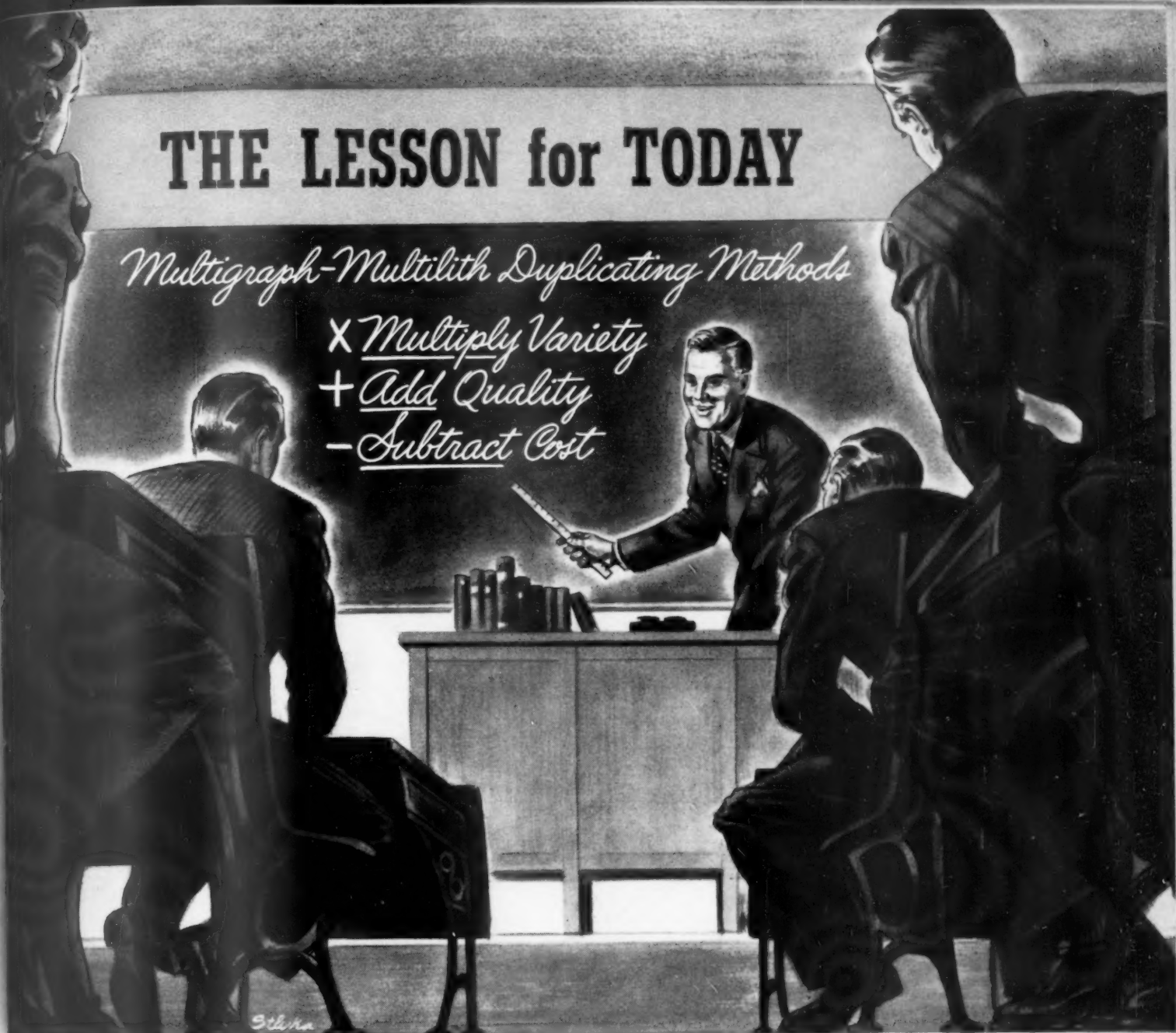
They did! Monday morning, the machines couldn't be started because every one of them and every tool in the shop had been literally sterilized. The young man had discovered that, when tools were returned to the stock room, they were oiled; that parts of many machines were thoroughly greased each night. He concluded that this violated one of the ABC's of shop practice—"always be clean." So he had the two men give everything a thorough going over with hot soda water. By Monday rust was everywhere.

Perhaps that story, which we may call "The Adventure of the Bright Young Man," has no moral. On the other hand, perhaps it has, especially at a time when the American industrial Aladdin is being urged to rub his lamp and thereby produce guns, planes, ships, tanks and tax payments—to say nothing of mechanics—in record time.

THE LESSON for TODAY

Multigraph-Multilith Duplicating Methods

X Multiply Variety
+ Add Quality
- Subtract Cost



Is your knowledge of office duplicating up-to-date?

If your business uses ruled forms for office, store, or factory . . . letterheads . . . inter-office and field communications . . . selling and collecting letters . . . promotional literature . . . you should have up-to-date facts about the X, +, and - of Multigraph-Multilith Duplicating Methods.

X means you can duplicate essential ink-on-paper jobs in 12 different ways.

+ means you can do work of higher quality.

- means you can save substantial sums of money.

The yearly cost of duplicating WORDS, FIGURES, LINES, and PICTURES on paper is an *important* item of expense in every business. *Multigraph* offers not just one but a wide range of duplicating methods from which you can choose the one best suited to your individual requirements. You can be sure that any one of Multigraph's versatile methods will produce work of superior quality at costs so low it will be a pleasant surprise.

For latest information about office duplicating, call MULTIGRAPH SALES AGENCY (listed in principal city telephone books) or write for samples direct to

ADDRESSOGRAPH-MULTIGRAPH CORPORATION • Cleveland, Ohio

ADDRESSOGRAPH-MULTIGRAPH OF CANADA, LTD., TORONTO

Sales Agencies in Principal Cities Provide Service Everywhere



TYPICAL DUPLICATING FOR MULTIGRAPH-MULTILITH METHODS

Letterheads and Envelopes
 Office and Factory Forms
 Catalog Pages and Inserts
 Price Lists and Quotations
 Instruction and Parts Books
 Direct Advertising Material
 Typewritten Letters and Bulletins
 Complete Personalized Letters
 Messages on Post Cards
 House Publications
 Dealer Imprinting on Folders
 Display and Price Cards
 Gummed Labels and Stickers
 Cartons and Wrappers

Multigraph and Multilith Duplicators

TRADE MARK REG. U.S. PAT. OFF.

TRADE MARK REG. U.S. PAT. OFF.

Some brave data is available that, in a few fundamental phases, Aladdin has done a superior job of lamp rubbing. A glance at the headlines, however, reveals that this pleasant condition is not general. Aladdin is fumbling.

They'll blame the business man!

IN the light of the tremendous progress in laboratory and shop practice in the past 20 years there must be a reason for this fumbling. One group says there are too few federal commissions, another that there are too many. One says authority is too widely distributed, another that all of the commissions together haven't any real authority. They can make regulations and produce red tape—but can they cut it?

Eventually this will boil down—if it hasn't already—to complaints that the business man and the industrialist are to blame. A lot of loose, general and often politically privileged talk already is getting into print about higher up sabotage of the defense program. It occurred to me therefore that a check up on some of the sillier mistakes of the last war might throw some light on the situation and help to clear the atmosphere.

This study reveals that history is now up to its old trick of repeating. But, just as \$1,000,000 then is \$1,000,000,000 now, so the scale is magnified on the muddling front. Then individuals blundered through early confusion to some sort of order. Now we have organized our blundering under the direction of text book technicians, self-anointed psychoanalysts and Bright Young Men.

As a result, every business man, and particularly those engaged on defense orders, today must set up common sense defenses against the stupidities of a defense program directed in its detail by bureaucrats. Every business has had to surrender an increasing amount of internal control to these Bright Young Men. But the man who takes a defense contract puts them into the driver's seat—if he doesn't learn how to kick them upstairs.

To make this specific, the sharp distinction between conditions during the World War and the present defense program is that Aladdin is no longer boss. He took orders then, it is true, but he took them from the top in the form of contracts and, except for relatively minor regulations, all he had to do was to meet the specifications. To a large extent he was free to exercise his judgment in buying where he pleased, to take greatest advantage of time, quality and price. He could also "juggle the job"—dividing up any operation to put on pressure, taking chances on misfits and shifting or eliminating them as they were spotted. Thus national coordination was achieved as nothing more than the sum of its parts—which constituted interplant and interindustrial ability to "get it done."

Some big laughs developed in this process. But I think the most learned of the centralized control and do-everything-by-federal-regulation lads will have to agree that the only national bottleneck which grew steadily worse throughout the war and for a couple of years afterward was the railway system.

Here was the one great unit on which the Government replaced the thinking material of private industry with that of political service. It took over the roads, ran them ragged and, when the smoke cleared away, Congress reached into the taxpayers' pockets for millions of dollars to pay for the damage done. The result is pretty generally known but I do not think the average citizen has ever been told the reason.

Let me offer a few examples from personal observation. Less than a year after the Government assumed control, an irate old freight engineer came into the office of the newspaper where I was employed and I was assigned to hear his story.

"Take a look at the claims for damage to goods in transit," he said. "Compare them to what we used to smash up on this division when it was a railroad. When you find out what the difference is I'll take you out in the yards and show you why."

The records were public property, of course, so I took a look. In normal times this division, a busy one, had been running claims never exceeding \$2,000,000 a year. But, in the first six months under federal control, \$8,000,000 worth of the shippers' property was destroyed.

Efficiency—until something breaks

IN the yards the engineer then showed me how trains were being made up. The shifting crews and the yardmen were railroaders, but they and their railroad bosses had learned to follow orders, and these were being dictated by federal experts to whom a freight car was a freight car. As a matter of fact, there was as much difference between a spavined wooden box car and a steel gondola as between a covered wagon and a modern motor truck.

Priorities, however, looking to the more efficient movement of tonnage, sent the smaller cars to the luxury and nonnecessity industries, the battleships to the makers of pig iron and munitions. This was as it should be. But, where a railroad man would never make up a train with one of these fragile cars loaded with talking machines or bric-a-brac between a couple of gondolas of ore, coal, or some other heavy shipment, the federal make-up boys did. A pusher locomotive was then stuck on the back of the long train to help the two leaders get it over the hump in the division and when anything cracked it was always the car with the most expensive merchandise.

Witness also the federal agent telling the hardshells of the Pennsylvania railroad how to buy supplies. The Pennsy uses a lot of Indian Red, a highly concentrated paint base of which very little is a lot. To save money, the federal man bought it in carload instead of barrel lots—enough to paint

When the Government was through with the roads, the taxpayers paid for the damage



★ BENDIX
★ ECLIPSE
★ PIONEER
★ SCINTILLA
★ STROMBERG
★ ZENITH



Helping America Prepare!

At sea, ashore and aloft,
the trust of our nation's
defenders calls for our
best . . . and we pledge it!



From a simple signal gong to a complete ship-wide communicating system, the Marine Division of Bendix Aviation Corporation serves our seafarers from this Brooklyn plant.

THE biggest job in history! Hard at it, with no stirring notes of bo'sun's whistle or bugler's call to inspire them, our twenty thousand citizens are intent and busy at lathe and bench, at desk and drafting board. Their inspiration is the knowledge that America wants and needs, and *has faith* in the things Bendix people have spent years in developing, and are producing now, with "all-out" speed.

Our navy's ships, our new-born merchant fleet, must have the complex "nerve systems"—the Bendix-Cory marine 'phones and telegraphs famous for a hundred years.

Our navy and army fliers need Scintilla Magnetos and Spark Plugs, and Stromberg injection carburetors. They require Bendix landing gear, Pioneer aircraft instruments, Eclipse generators, dynamotors and starters—all in prodigious quantities. They are served by Bendix Aircraft Radio, with unfailing intercommunication. And in the army's trucks and tanks, engines by hundreds of thousands are cranked through Bendix Drives, and fed by Zenith Carburetors.

Straight through fifteen busy Bendix plants, our part of America's Big Job is flowing as swiftly as men and minds and machines can speed it. To the end that honest men may live in the peace and liberty their fathers won and guarded.

Bendix

AVIATION CORPORATION

Plants at: BENDIX, N. J. • SOUTH BEND, IND. • BROOKLYN • ELMIRA, N. Y.
SIDNEY, N. Y. • BALTIMORE • NEW YORK • DETROIT • TROY, N. Y.
PHILADELPHIA • WAYNE, MICH. • BURBANK, CAL. • WINDSOR, ONT.

all the box cars on the lines and all the pier head on miles of river front. The same experts used the arches under the so-called "Chinese Wall" of the road's elevated into Broad Street Station, in Philadelphia, as storage space. A couple of trainloads of good Portland Cement were left there, the arches dripped as usual, and the taxpayers eventually paid the bill not only for the cement but for carting away the resultant useless rock.

Business corrects its errors

THESE are only a few among thousands of examples of how a centralized governmental error tends to perpetuate itself. On the other hand, when initiative remained with business men, mistakes and frauds were discovered and corrected before much harm was done. Among the frauds was one which developed at Hog Island when some horny-handed toilers discovered that more men had been hired than the foreman could watch. As a result several of them got on the pay roll twice—sneaking off one job after clocking in to clock in on another.

The system of staggered hours made this simple in the confused early days. But, when some of the men finally got the number of jobs they were holding up to five each, the good thing exposed itself. Arrests were made and the time clock system was synchronized with the entrance gates. Despite all the criticism of the cost-plus system, the late Mat Brush and his business associates were comparing ship with ship in the search for red ink, instead of waiting for it to show up.

As a result of this policy the enterprise that in the beginning was called a ridiculous mistake turned out to be a triumph. The world's largest shipyard was tossed up on that mud-bar in the Delaware, a keel was laid before the top of the first shipway had been finished, and five 7,500 tonners were launched in a single day before the war ended. Later Mr. Brush ironed out most of the bugs, got the plant tuned up and launched seven ships in a single day. The yard's record of 122 completed merchantmen and transports delivered in a little more than two years is still a neat job of lamp-rubbing.

Another individual example illustrates not only the loopholes caused by the early confusion then, but the fact that individual initiative at the top gave opportunity for the same quality at the bottom. The case is that of a friend, a college graduate who couldn't obtain a position at any of the executive divisions for which he had been given to understand his academic education had equipped him. An older hand gave him some advice when he said he had to give up his quest for a position and get a job.

"That's easy," said the veteran, "look in the classified advertising columns for what the factories want most of. Tell the man doing the hiring you know all about it. Then see how long you can bluff it out. All they can do is to fire you when they get wise, but you'll be paid, and you're bound to learn something, if only what not to do. With that information you'll be able to make the bluff stick longer at the next plant."

For six months thereafter the young man drew a good salary, including a couple of increases, as a machine designer. Previously he had never touched a drawing board. The first day on the



The bright young man rejected an applicant with 15 years' experience in favor of a sartorial masterpiece

job he was in a panic, trying to appear busy and keep his eyes on his work while stealing glances at his fellows to see how the job was done. The second day he got chummy with the young men on either side of him and learned that they were veterans of one week at the same enterprise.

The "modern" method of hiring

THIS young man was working on a task that had been made as simple as possible in the process of subdividing jobs under the urge for speed. He knew nothing about it—and that was one of his great assets. The knowledge of his own ignorance had him in there desperately determined to learn, and he did. Fellows who didn't got fired. But the young man who made good might have difficulty getting a hearing today.

A big factory in an eastern seaboard city, for example, recently got an important munitions order. When prices and specifications had been agreed upon, the only question was the matter

of skilled labor. A bureau head in Washington who will pass eventually on certain details pooh-poohed the idea of a shortage in this field. An alert, trained young personnel manager, he said, could dig up or develop all the skilled men he wanted.

This particular manufacturer happens to be running a plant founded by his grandfather and operated by his father in the interim. He knows every machine in his factory and has patents on a number of them. He knows, too, how to get all the skilled men he wants—if the contract price is high enough to stand upping a wage schedule that is now tops—and thereby run-

ning the risk of competitors upping it again and taking the men back. He had always worried along as his own personnel manager. But now, when the bureau head recommended a young man, the manufacturer agreed to give him a chance.

An engineer from a supplier happened to be waiting in the room where the new personnel man was interviewing applicants. He overheard three interviews. They are too long to repeat in detail, but here is the gist of what happened as the engineer gave it to me:

Number one wore working clothes, with a blue shirt and a dark tie. He reported ten years experience as a tool maker and named the plants. But he admitted no employment in that line for seven years. Meantime he had been driving a truck. He was rejected as out of date after he had explained why he hadn't applied for a shop job before, which was chiefly because he was waiting for one near his home.

Number two was also dressed as a
(Continued on page 106)



Calling All Gearshifters!



TRY

Chrysler's Fluid Driving

FOR YOURSELF

YOU'VE heard it, of course . . . all this talk about Chrysler's *Fluid Driving*. Probably you've listened to owners and wondered why they raved about it so! Maybe you've even doubted that any motor car could be that good!

Well, you'll never know what you're missing until you go "*Fluid Driving*" yourself!

It's so much easier, simpler, safer, quieter, smoother, that you have to try it yourself to know what it's all about!

Why shift gears, when you can have a Chrysler with *Fluid Drive* and Vacamatic transmission?

Why buy a new car with the same kind of drive as your old car when a Chrysler with *Fluid Drive* costs so little? (You'll be surprised how little!)

Any Chrysler dealer can show you what you're missing. And he'll be delighted to make a date!

★ Tune in on Major Bowes, Columbia Network, Thursdays, 9 to 10 P.M., E.S.T.



FOR SAFETY!

**Why Chrysler
includes a
Safety Clutch
with Fluid Drive!**

The Safety Clutch is like a lifeboat on a ship. You will use it very seldom, but you're mighty glad to have it when you need it. A very valuable safeguard for parking . . . for maneuvering your car in close quarters or dangerous places!



BE MODERN with Fluid Drive — Buy Chrysler!

The Map of the Nation's Business

By FRANK GREENE

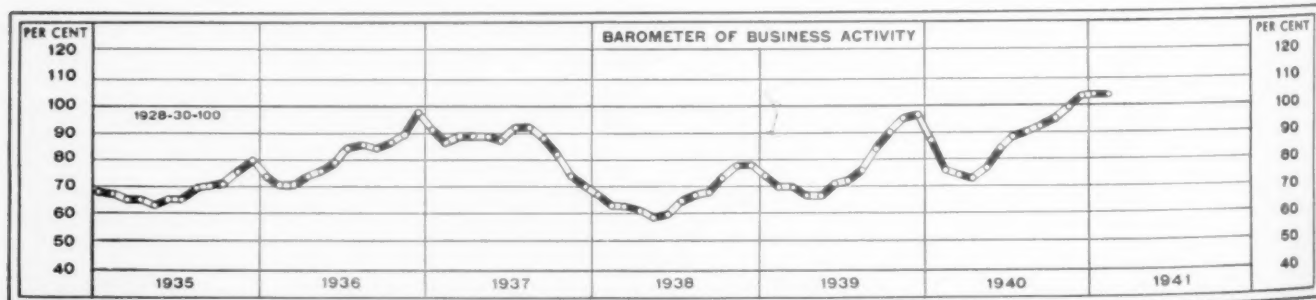


CAPACITY operation of armament industries continued through February, accompanied by expanding plant facilities, with shortages of skilled labor preventing a more rapid increase of output. Non-defense production, as yet relatively unhampered by priorities, prospered from expanding purchasing power. Steel bookings rose sharply despite capacity production. Automobile manufacturers entered on arms orders while regular output and sales continued at record levels. Cotton and rayon mill activity held exceptionally high.

Electricity output widened the gain over 1940 while rail carloadings advanced 14 per cent above the same period, all classes of freight participating except grains and livestock. Defense construction held both public and private building to the high levels of January.

Shipping space shortages forced sharp advances in import commodities. The tight situation continued in non-ferrous metals. All sections experienced sharp gains in retail and wholesale distribution.

National defense continued the major factor in maintaining a light Map, while good moisture conditions benefited ranges and winter wheat areas



Reflecting the wider distribution of rearmament work in connection with the defense program, business and industrial activities in February were maintained at the high level reached in January

OUT OF PETROLEUM...

Chickens

Courtesy—Poultry Supply Dealer

VITAMIN E is now being added to commercial poultry feeds to make hens lay better and increase the "hatchability" of eggs...

Scientists at Shell's research laboratories observed some peculiar crystals in a new product which they had made from petroleum.

These laboratory curiosities were valuable in the artificial creation of *Vitamin E*—essential to animal fertility. Here, from an oil well, was one of the mysterious forces contributing to the production of life itself!

Shell scientists have found a key to the production, from petroleum, of synthetic rubber—glycerine—TNT—plastics—scores of needed things. Yet these important and revealing accomplishments are by-products of their main assignment: Constant improvement of Shell fuels and lubricants.

INDUSTRIAL LUBRICATION is changing as rapidly as production itself. Yesterday's solution

is seldom good enough for today.

Shell's \$3,500,000 research facilities, manned by 821 scientists and assistants, exist solely for the purpose of finding something new—and better.

In literally hundreds of instances, Shell lubrication engineers have opened the way to increased production and lower operating costs, by lubrication changes.

Before Shell industrial lubricants are offered to you, they are plant tested under all kinds of actual operating conditions.

With the use of Shell lubricants, you are assured the continued watchfulness of Shell men—a service which needs no prompting.

Are you quite sure that your plant has the benefit of all that is new in lubrication, as it develops? You will find a Shell man's recommendations entirely practical—and made without obligation.



SHELL INDUSTRIAL LUBRICATION

"Enthusiality" Builds Better Cities

By OREN STEPHENS



In Minneapolis the Jaycees took the lead in a successful "get out the vote" campaign

THE irresistible lure of a construction job stopped me on the street in the little city of Fort Smith, Ark.

"It's going to be a new boys' club," remarked a native who also had stopped to watch the builders.

"Looks like it's going to be a big one for a city of this size."

"Yes," he replied, "that's one of those it-couldn't-be-done projects, but a bunch of young fellows did it. The building is costing \$85,000 and \$25,000 was needed to finance it. Two hundred members of our Junior Chamber of Commerce voluntarily tackled the job—and raised more than \$32,000."

"Must be a progressive group."

"You said it, mister. They'll try anything that's good for the community. Why, about the time they finished that, they conducted a 'Go To Church' campaign. Increased attendance 61 per cent, too."

Fort Smith is not unusual. I was to learn that, throughout the United States, 110,000 members of more than 1,000 junior chambers of commerce are making their communities better places to live in by spon-

soring worth while civic projects.

Their record of accomplishment should dispel any fears alarmed elders may have that all members of the younger generation are going to the dogs—or to alien isms. That record is as amazing as it is inspiring.

In the little town of London, Ohio,

WHILE pessimists complain about the decadence of American youth, the country's young men have been taking over civic responsibilities with such enthusiasm and success that they even had to coin a new word to describe their methods



Mobile's Azalea Trail festival which brings in 100,000 tourists each year is another Jaycee Project

the Jaycees—the name they have adopted unofficially—raised more than \$500 to provide free dental care for needy school children. To 300 children the two cooperating dentists gave 500 corrective treatments. So successful was the clinic that it is to be continued.

Duluth Jaycees worried about the

city's pressing unemployment problem. Failure of timber and other industries, technological improvements in mining, and a high rate of seasonal unemployment had put 4,000 workers on some form of governmental assistance. Duluth had the highest *per capita* relief cost in the nation.

"What," they asked themselves, "can we do?"

First they held a four-day Job Creators' Congress, theme of which was "Think your way to a job." Scores of amateur inventors exhibited their "brain children." Some found backers and the resulting products are now on the market.

Home craftsmen exhibited their products for sale and took hundreds of orders. One was forced to turn his home into a small factory with five full-time employees.

This was followed by a Give-a-Job campaign, held in cooperation with the State Employment Service and with much assistance from the Duluth press. The decreasing trend of placements by the employment agency was reversed,

with 1939 actually showing a 35 per cent gain over the previous year. While many new and temporary jobs were created, 65 per cent were permanent.

No "Dead End" kids for Dallas

ALTHOUGH only two years old, the Cleveland Junior Association of Commerce—not all units call themselves junior chambers of commerce—entered the housing field with the enthusiasm of a federal agency with "unlimited" tax funds. Now they point to West Hill Colony, a \$200,000 model community of homes, and say proudly, "we did it."

They formed a corporation which bought 100 acres of land, divided it into one-acre lots, and sold prospective home owners on the idea of building in the planned community. To coordinate architectural design, yet to make each home distinctive, one firm of architects was commissioned. Multiple construction was used to cut costs, and further savings were made when the building trades were persuaded to become co-

sponsors and permit use of prefabricated materials. Homes were restricted to a minimum valuation of \$5,000, and to Colonial, Cape Cod, and Western Reserve types of architecture. Directors of the corporation are owner-participants. Its officers are the officers of the Junior Association of Commerce.

Dallas, Texas, Jaycees bought a wooded site of 64 acres, provided camp buildings and equipment, then turned the property over to the Dallas Big Brothers as a summer camp for underprivileged boys. One way in which necessary funds were raised was in production of Sidney Kingsley's "Dead End" at the Dallas Little Theater.

Dallas Jaycees also conduct a year-around traffic safety program which is one reason why the city was selected the nation's safest in 1940.

Sixty thousand Memphis citizens enjoyed five weeks of open-air light opera last summer, thanks to Memphis Jaycees. Starting with a fund of only \$250, they ended the season by spending \$32,000 on five productions—"The Desert Song," "Sally," "My Maryland," "Katinka," and "The Firefly"—yet came out with a small profit. Capacity audiences attended each production in the Overton Park open-air theater. Tickets ranged from 25 cents to a dollar.

Famous in the South, and among flower lovers everywhere, is Mobile's Azalea Trail festival. In the early spring, 100,000 out-of-state tourists drove over the 17-mile marked trail through city and suburban flower-lined streets. Who started this pilgrimage and promotes it each year at a cost of \$5,000? The Mobile Junior Chamber of Commerce.

The Boston Junior Association of Commerce was using the radio to foster friendlier relations with other nations long before the Government became interested in this method of



The Job Creators' Congress, one phase of an employment effort in Duluth, found bankers for obscure inventors, Give-a-Job campaign brought many placements

Dr. Laybourne, London, Ohio, works on one of the 300 children benefited by Jaycee inspired dental clinic



propaganda. "Young Men at Work" is broadcast each Tuesday afternoon by WRUL to listeners wherever there are short-wave sets—in Europe, Asia, Africa, Latin America, Australia. Listeners may write for free copies of *Future*, official magazine of the U.S.J.C.C., and thousands do. Letters to the young men of Boston show that other young men scattered throughout the world have the same hopes and problems. Response is particularly heavy from Australians and New Zealanders.

Apples, smoke, world fairs

IT IS well known that San Francisco Jaycees promoted Treasure Island, for two years the home of the world's fair, but now to become either the principal airport of the Bay region or perhaps a naval base. They also not only saved the Presidio from abandonment—long before the current emergency—but even induced the War Department to spend \$7,500,000 rehabilitating it.

The Durham Foundation, a community trust serving as a clearing house for philanthropic gifts to be used for betterment of the North Carolina city, was founded by the Jaycees. Its first gift was a club house and 18-hole golf course, which are being operated profitably for the benefit of Durham citizens.

Jaycees of the Ozark region have made great progress in a program to rejuvenate the Ozark apple industry.

Such a recital could continue indefinitely, because each of the thousand units has completed at least one outstanding community project. They eliminate smoke, get out the vote, take fingerprints for the civilian files of the F.B.I., wage fire prevention campaigns,

promote agriculture, industry, aviation and Americanism, beautify their cities, hammer at interstate trade barriers, agitate for merit systems in government, promote trade, lead or lend assistance to public health and youth welfare programs.

All projects have one thing in common—their sole objective is community betterment.

How do young men accomplish so much? They coined a new word to answer that question. It is "enthusiasm"—the enthusiasm to dream for the future and the vitality to make those dreams come true. Who are the members? For the most part they are young business and professional men, though the only membership requirement is that they be not younger than 21 nor older than 35. When a member reaches 36, he becomes a "worn-out rooster" and is given his honorable discharge.

The average Jaycee, according to a recent survey, is 30 years old, earns \$300 a month, gives instead of takes orders, is married and has children, is progressing to home ownership, owns a car and has insurance, drinks and smokes, travels during vacation, and follows a hobby or sport. Fourteen per cent are between 21 and 25, and 82.5 per cent of these earn less than \$2,400 annually. Thirty-two per cent are between 25 and 30, and 60 per cent of these earn less than \$2,400 annually. But 54 per cent are between 30 and 36, and 60 per cent of these earn from \$2,400 to \$5,000 annually. Eight per cent earn from \$5,000 to \$10,000.

They are never concerned with partisan politics as a group. Individually, they play an important part in political affairs of their communities. Many of them are office holders. But even as individuals they are interested in politi-

cal realities rather than political theories. It is this that sets them apart from other youth organizations.

They are interested in the business welfare of their communities, though not exactly in the same manner as the chambers of commerce. While the chambers of commerce are concerned primarily with business as such, Jaycees are concerned with it only as it affects the community as a whole, and from the viewpoint of all the people rather than of business men alone.

Unselfish civic service was evident in the very beginning. That was in 1915 when young Henry Giessenbier, Jr., of St. Louis, heard a speaker trying without much success to gain support for a bond issue for some needed public improvements. "Why not," Henry asked himself, "mobilize the city's young men to help?"

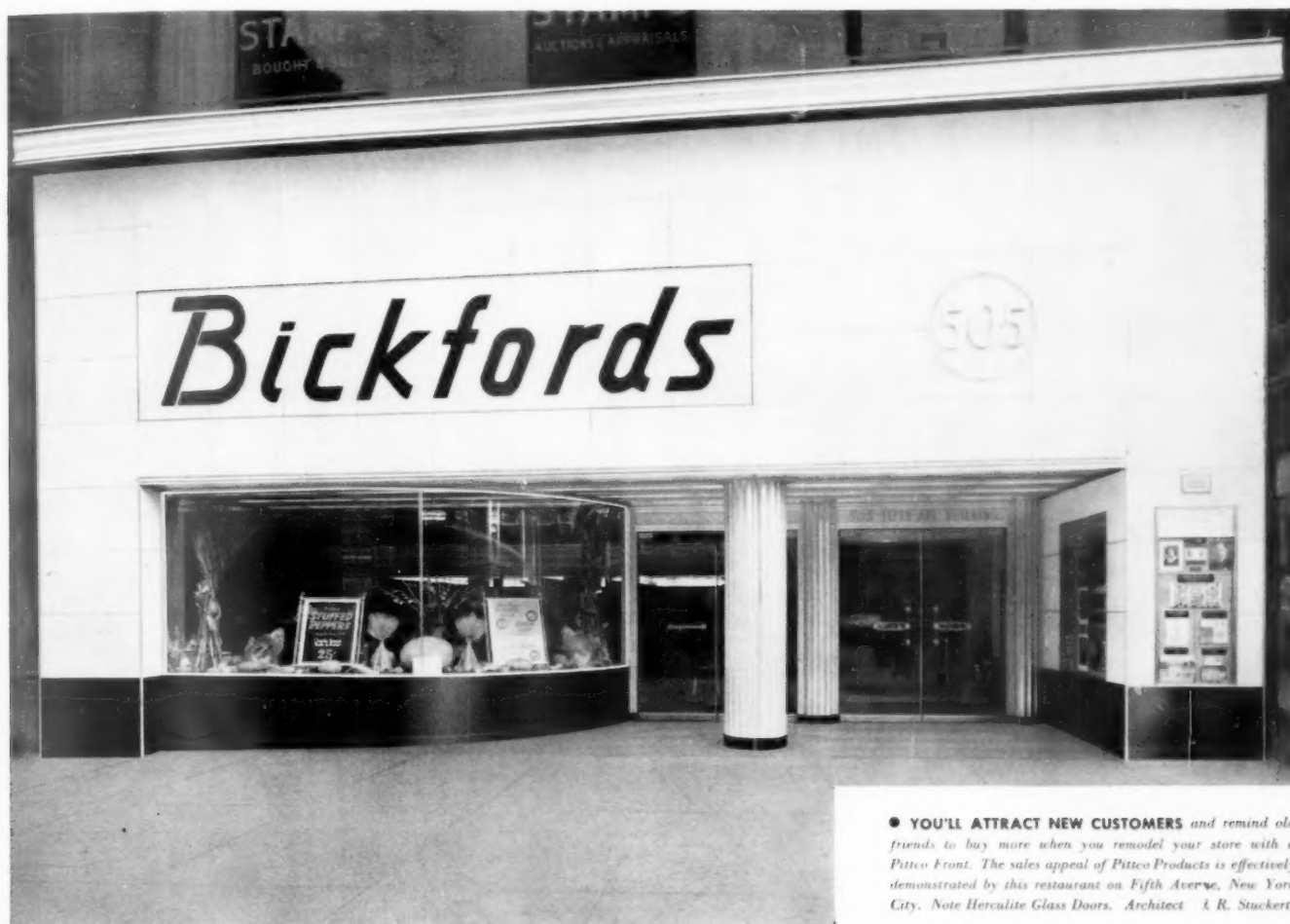
The dancers "swing" it

AT THE next meeting of a federation of dancing clubs of which he was president, Henry argued that social activities were all right but that young men should also engage in active public service. The members agreed and elected Henry president of a new organization called the Young Men's Progressive Civic Association. They pitched in, and the bond issue was voted. The association then turned its attention to other civic projects and in a few years the St. Louis Chamber of Commerce endorsed its program. Because this gave the association needed recognition, the name was changed to the Junior Chamber of Commerce.

Henry decided in 1919 that the program should be adopted nationally. At his invitation, 24 cities sent delegates to a caucus in St. Louis, January 21,



Inspiration to better citizenship is this \$85,000 boys' club in Ft. Smith, Ark.—population 30,000-odd. Jaycees tackled it though everyone knew it couldn't be done



• YOU'LL ATTRACT NEW CUSTOMERS and remind old friends to buy more when you remodel your store with a Pittco Front. The sales appeal of Pittco Products is effectively demonstrated by this restaurant on Fifth Avenue, New York City. Note Herculite Glass Doors. Architect: A. R. Stuckert.

All dressed up...and going places!

PROFITS MOUNT . . . when your store wears a new Pittco Front

MAYBE you think your comfortable old store front is good enough for you. But how about your customers? There's no doubt about it—they prefer a store with a shining Pittco Front that promises pleasant shopping conditions and a full dollar of value for every dollar spent. The minute fewer new people visit your place of business—take warning! It is time to dress up *your* store with a Pittco Front.

A handsome new Pittco Store Front attracts a greater volume of trade from ever-widening areas, and exerts a strong influence on visitors from out of town. Merchants of all kinds over the country have written us that business increases following Pittco modernizations have far exceeded their expectations. Read about their experiences in our new Store Front Book. You can get it by mailing the coupon. Do this today.

Because of our complete line of Pittco Store Front Products, and their ready availability anywhere in the country through one of the hundreds of Pittsburgh Plate Glass Company branches and jobbers—you will find it a simple matter to order a new Pittco Front. And when you remodel, consult an architect to make sure of an economical, well-planned job. Our experts will cooperate with him gladly in planning a Pittco Front to suit your needs. You can pay for your Pittco Front with the Pittsburgh Time Payment Plan if you wish—just 20% down, and the balance in monthly payments.

PITTCO STORE FRONTS
PITTSBURGH PLATE GLASS COMPANY
"PITTSBURGH" stands for Quality Glass and Paint

Pittsburgh Plate Glass Company
2258-I Grant Bldg., Pittsburgh, Pa.

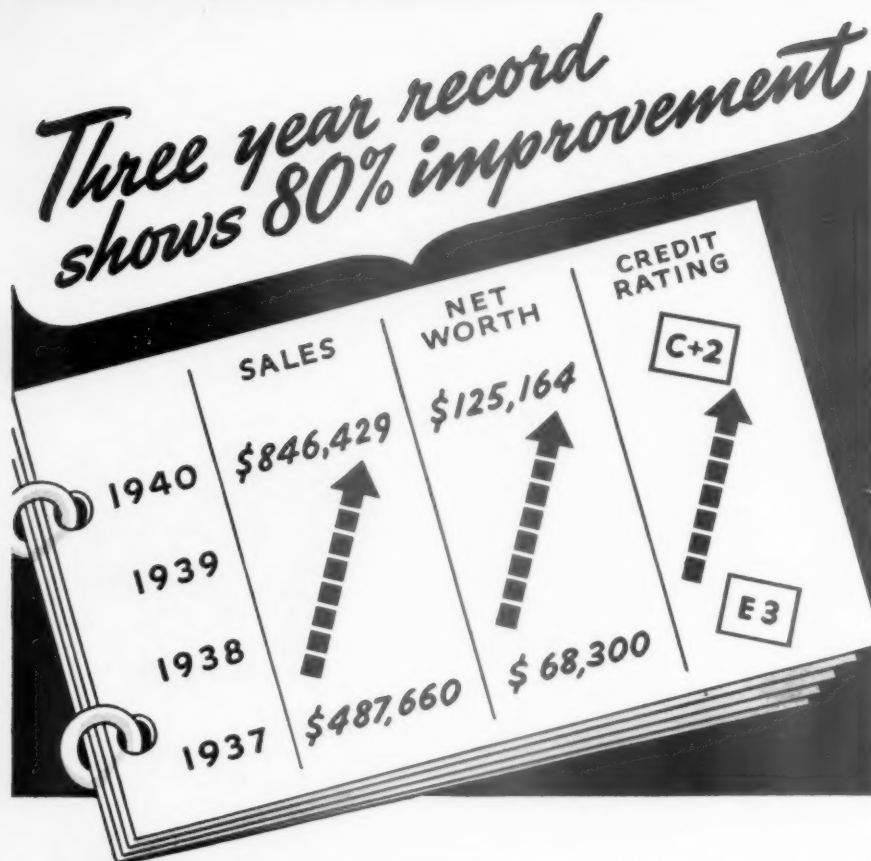
Please send me, without obligation, your new, illustrated booklet,
"Pittco Store Fronts — and Their Influence on Retail Sales."

Name,

Street,

City, State,

GOOD BUSINESS NEWS



One of the *Midwest Mfg. Corporation's real problems was a lack of capital to handle the potential sales expansion. Neither in theory nor practice was OPEN ACCOUNT financing new to the management. They had been selling receivables to local banking connections on occasion. But the limitations were unsatisfactory. In August, 1937, they made arrangements to use COMMERCIAL CREDIT service. With the change came immediate improvement. Orthodox credit routines went overboard. Frozen funds were released and turned over at a new pace. For three years, the service has been more than adequate for every need. Except for substantial increases in salaries of the stockholder owners, in lieu of dividends, Net Worth would have shown a considerably larger increase.

Says the president: "A great deal of this is due to the flexibility of the banking arrangements on your OPEN ACCOUNT plan. It has been gratifying to work with you and to have this service."

We have adapted our service to meet the needs of many different industries. We can show you how, with no additional capital investment, you can utilize advances against inventories and receivables and increase your profits. We are also prepared to finance your purchases of needed productive equipment. Write for copies of "Capital at Work" and "Comparative Costs of Financing." Address Dept. NB.

**A fictitious name, but the facts and figures, taken from our files, can be verified.*

COMMERCIAL CREDIT COMPANY

"Non-Notification" Open Account Financing

BALTIMORE

BOSTON NEW YORK CHICAGO SAN FRANCISCO LOS ANGELES PORTLAND, ORE.

CAPITAL AND SURPLUS MORE THAN \$60,000,000

1920. They returned in June to complete organization of the United States Junior Chamber of Commerce, and Henry became its first president. He died in 1935, but the organization he founded carries on as a fitting memorial to his idealism.

The movement did not sweep the country. In fact it appeared at times that the organization could not possibly live through the year. As late as 1931 there were only 85 junior chambers of commerce in the United States, and by 1935 the number had grown to only 250. But charters now are being granted to new units daily. In addition to those in the United States, there are affiliates in Canada, Hawaii, Alaska, and even in China and Australia, so that the organization now is international in scope.

Because they are already becoming leaders in their own communities, these young business and professional men will be the nation's leaders tomorrow. Problems they are destined to inherit will be grave indeed, but they face the future with an amazing and heartening confidence. Yes, they agree with you, there will be serious problems to solve, and then they will add that, while the United States has faced serious problems before, it has progressed in spite of them.

They have faith in America and Americans. And those of us who have been fearful of the nation's leadership of the future may very well abandon some of those fears and have faith in them.

They've come of age now and are going strong.

Do You Want Good Government?

(Continued from page 28)

hearken more respectfully to a voice that speaks for a numerous and widely representative body.

What is possible on a state-wide scale has been demonstrated in California where the State Chamber of Commerce under General Manager James Mussatt, serves as a two-way medium, through which the needs of business may be communicated to government and the problems of government relayed back to the business fraternity.

To develop their position on any given issue, the directors of the State Chamber employ a thoroughly democratic technique based on two policies:

1. That efforts of trade, civic and commercial bodies should be closely coordinated.
2. That all regions and all interests should be consulted before any stand or campaign of action is adopted.

How does this work out?

Assume, for the sake of illustration, that the question of state relief administration is before the legislature—as it happens to be while I write. What position, if any, should the vocal commercial interest, including agriculture, take on the matter—back the Governor, who would retain relief administration for the state, or back the "economy block," who would return it to the counties?

Suppose that the directors decide that the problem should at least be raised. To the various regional councils, the State Chamber's bureau of research supplies facts. All commercial and agricultural groups likely to be interested are invited to present their reactions. Special regional hearings may be called for this purpose. Reports, forwarded to the state directors, provide a cross-section of opinion upon which the directors are able to base recommendations to the people and their legislators.

The California Chamber, also, has been unusually successful in stimulating and guiding the work of the tax committees within local units. Some 75 chambers are following a well-outlined program. The committees meet regularly, to consider city, county and school district business. They examine public budgets, check on the volume and the quality of government services, estimate their community's ability to support the tax load, watch bond interest balances, consider the advisability of proposed public improvements, and draw up periodic summaries for release to the public.

Politicians are sometimes helpful

IN CERTAIN cities and counties (including Los Angeles) chamber representatives have become *ex-officio* co-workers with the supervisors in making out their budgets.

The young men of the Junior Chambers also have taken up vigorous lines of citizen action.

These examples do not mean that citizen participation is being directed only against the Government. In certain places, political leadership is catching up with public sentiment, even getting ahead of it. An open door policy for city hall and county court house is being anticipated by officials themselves. Frank Gaines, drafted from his private career to serve as Mayor of Berkeley, Calif., felt he had the right to demand that the people who put him in office help him out.

Before each council meeting, he sends out 20 personal invitations. Half go to women, half to men; half to Democrats, half to Republicans. He employs corporation concepts. City manager, attorney and clerk rate as "executives," the council as the "board of directors" and the invited citizens as "stockholders." Mayor Gaines, to break down timidity and formality, makes a special point of having everybody meet everybody else. The stockholders find seats reserved for them. They receive copies of the minutes of the previous meeting and the agenda for the day. They are expected to interrupt at any time with questions or comments. After adjournment, they find transportation provided for a tour of city properties.

Berkeley chalks up several gains for the plan. The council, on its good behavior before its *ex-officio* aides, is more alert and decisive. Much stockholder cynicism about the incompetence and wild extravagance of "executives" and "directors" has been dispelled. The newspapers have given city business fuller publicity. Citizen visitors have become proponents of changes and improvements which, normally, they would ignore.



THIS TRUCK-TRAILER UNIT REPLACED THREE TRUCKS ... AND IN ADDITION CUT MILEAGE 30%

HERE is a typical instance of how the Truck-Trailer method works: Pennington Brothers, Inc., now use one truck and Fruehauf Trailer to do the same hauling that previously required three trucks. Think of the savings! Gas, oil and upkeep costs for only one truck... Far less investment in equipment... Far less to write off in depreciation... And, above all, a saving each week of more than 700 miles of travel as a result of the more efficient routing made possible by the Truck-Trailer method of hauling.

It's surprising how much you can save—and the reason is simple. A truck, like a horse, can pull far more than it can carry—at least three times as much. In short, you can pull your usual load with a smaller truck or you can pull a much larger load with a truck of the same capacity you have been using. Your costs are sure to be lower in either case.

Another source of big savings lies in the use of the "shuttle" system. Instead, say, of using three load-carrying trucks, you use one truck and three Trailers. You leave only the Trailers to be loaded or

unloaded and keep the truck busy constantly, pulling first one and then another of the Trailers ready to be moved.

The Truck-Trailer method has proved workable for literally tens of thousands of business men. The chances are great that you, too, will profit by its adoption. Why not call in a Fruehauf man and get the interesting facts?

World's Largest Builders of Truck-Trailers
FRUEHAUF TRAILER CO., DETROIT
Sales and Service in Principal Cities
Factories: Detroit, Kansas City, Los Angeles, Toronto

BEFORE
NUMBER 1 TRUCK made eight round trips each week, traveling 618 miles.
NUMBER 2 TRUCK made eight round trips each week, traveling 832 miles.
NUMBER 3 TRUCK made six round trips each week, traveling 1014 miles.
TOTAL for the three trucks: 2464 miles.

AFTER
Because of the large capacity of the Truck-Trailer unit, this one vehicle handles the deliveries formerly made by the 3 trucks. Result: only 6 round trips are required per week, many empty return trips are eliminated. Total weekly mileage covered is 1730.

SAVINGS
In addition to the obvious savings in equipment expense and operating costs, the Truck-Trailer unit reduced the mileage traveled 734 miles per week.

Four and one-half million trucks and three and one-half million trained trucking men are ready to help defend the nation. Furthermore, motor transport is supplying a large part of the tax money needed to build and maintain roads vital to America's defense.



FRUEHAUF TRAILERS

"ENGINEERED TRANSPORTATION"—Reg. U. S. Pat. Off.

"Yes, yes, yes . . .
but can it cook?"



—says the Little-Man-Who-Wants-to-Know

- "Well, hardly! . . . This is a NATIONAL Typewriting-Bookkeeping Machine, usually used by stores and other businesses for making accounts receivable records. Easy to learn, easy to operate, fast, flexible and ready for anything—"



CNCR

- "Wait—will it solve problems of overhead and overtime?"
- "It certainly helps! This machine posts statement and ledger at one operation, prints proof strip, prints credit items in red, keeps all posting work always visible, accumulates necessary totals—gets more work done better and sooner, at lower cost—"
- "Saves time, I presume?"
- "Time and trouble and money! . . . You see, NATIONAL makes a complete line of business machines to handle records and control money—"
- "Machines for listing, posting, proving, analyzing, bookkeeping, check writing and signing, remittance control and more—"
- "That's enough! CONTROL sells me! . . . And I'll spread the good news!"
- "And remember—these machines pay for themselves many times over! They are made by the makers of NATIONAL Cash Registers—engineered, sold and serviced by specialists. Whatever your problem, see NATIONAL first!"
- Call the local office TODAY.

INVESTIGATE

National ACCOUNTING MACHINES!

THE NATIONAL CASH REGISTER COMPANY • DAYTON, OHIO

Cash Registers • Posting Machines • Check-Writing and Signing Machines
Bank-Bookkeeping Machines • Typewriting-Bookkeeping Machines • Analysis Machines

COPYRIGHT 1941, THE NATIONAL CASH REGISTER COMPANY

National

nore or resist. Attendance in the regular spectator benches has increased as interested stockholders return again and again to keep up with developments.

In Madison, Wis., Mayor James Law has called on citizens to set up a Civic Council to serve as an adviser to his administration. He expects eventually to have representatives from more than 200 organizations in the town. His citizen group meets monthly, attacks a specific problem. What to do about the proposed belt-line highway to route traffic around the city? What to do about increasing the number of liquor licenses? What to do about parking meters? Mayor James asks for definite constructive recommendations. He believes that the voter should watch public business, understand it and have convictions about it.

But it is in the towns, villages and communities, that the voter uprising has been most dramatic. Perhaps the outstanding pioneer in this grass-roots revival of democracy has been Henry Miesse of Indiana. He set the pattern for the county taxpayers association, demonstrated how to enlist citizen interest, initiated methods for analyzing and spotlighting public expenditures, supported the fight for Indiana's now famous Budget Repeal Law.

The movement has had a remarkable spontaneity, springing up in Massachusetts, Iowa, Kentucky, Utah, California. Many of its leaders have been amateurs, taking time out from their private affairs to plunge into the murk of public affairs.

"Stay mad and keep trying"

THESE taxpayer groups have little uniformity. Some, hardly more than good-intentions committees, are feeble and will die. Many are angry cliques. But the general overall trend, in numbers, permanence and effectiveness, is certainly upward. They have what the municipal leagues and research bureaus have most needed—a crusading militancy. The researchers have been inclined to lean on the comfortable slogan, "fact-finding not fault-finding." They have not appreciated that the people have to rise early and stay awake late to get ahead of politicians and public-employee organizations. A Newark citizen remarked after the recent setback at the polls, "We've just got to stay mad and keep trying."

It was all very well that the Governmental Research Institute of St. Louis should study, intellectually, such a lowly problem as garbage disposal and the use of non-patented asphalt paving, but it took insistent hammering to cut disposal costs from \$1.03 to 35 cents a ton and to knock \$500,000 out of paving expenses.

There is, on the other hand, the danger of too much heat and too limited a view. Many taxpayer associations have assumed that all government employees are scamps or incompetents, that any increase in a public budget is waste, that the government is best which costs the least. Too many have furiously rushed in to do something about finances and forgotten to look at the services rendered. There is evidence, for example, that one over-zealous organization, for all its achievements in cost-cutting, has at the

**ATTENTION
PARENTS:**

326,200 drivers, 24 years of age or younger, were involved in automobile accidents in 1939. What were the reasons? How can these youthful accidents be reduced?



PRESIDENT

Next case called:

YOUR SON

He's in trouble.

He has had an accident—in your car.

He has violated the law... he has received a summons... he's waiting his turn to come before the court.

Could he have avoided it?

Can he keep it from happening again?

Could you have helped him?



When you come right down to it, is it really your son's responsibility—or yours?

Maybe the boy was going a little fast.

But has he ever heard his dad brag about beating Ed Smith's record time from home to country club?

Maybe he did try to beat the light.

But has he ever been in the front seat with you when you "slipped through on the yellow"?

Maybe he didn't stop for a "stop sign."

But how many times has he seen you just shift gears and keep right on going?

You can teach your son the fundamentals of good driving and the facts

to know about automobiles. You can tell him about driving hazards and how to avoid them. You can have a "man-to-man" talk with him about sportsmanship on the road.

But—unless you practice these driving principles yourself—your son will never really learn them.

Isn't that reason enough to do a good teaching job now—and start setting that good example?

If you do, neither you nor your son may ever need to see the inside of a courtroom when the judge says—"Call the next case!"

Join the "Not Over 50" Club—more than 300,000 members pledged to drive safely and sanely. Free membership with certificate and car emblem. Write for application.

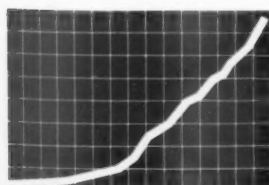
"If I Have an Accident, Do I Still Get the Dividend?"

In Lumbermens, the answer is "Yes."

An accident you may have does *not* affect your eligibility to participate in dividend sharing.

Lumbermens does not accept insurance on "just any driver." That is why the accident record of our policyholders is lower; why there is more money to divide among policyholders in the form of dividends. Remember, too, although you share in Lumbermens profits, you do *not* share in any loss, should one occur.

In the last ten years alone, Lumbermens has paid back to automobile policyholders more than \$24,500,000 in dividends—a good company to do business with. Thousands of agents throughout the United States and Canada are ready to serve and take care of you.



INSURE WITH
THE CURVE OF
CONFIDENCE

Growth of Lumbermens policyholders since 1912—the year of our founding.

Lumbermens

MUTUAL CASUALTY COMPANY

JAMES S. KEMPER, President Home Office: Mutual Insurance Building, Chicago
Operating in New York State as (American) Lumbermens Mutual Casualty Co. of Illinois



"We are sold on Air Travel"



Says J. P. SPANG, Jr.

*President of the
Gillette Safety Razor Co.,
Boston, Massachusetts*

"During the past year the executive and sales personnel of this air-minded company have flown an average of 20,973 miles a month. When our men fly the equivalent of more than seven trips straight across the country every 30 days, you know we're sold on Air Travel.

"There are many reasons for this, but the principal one is speed. In our business, timing is the essence of successful promotions. Air Travel enables our salesmen to give the story in person—put added punch into the drive—get the news to the trade fast and almost simultaneously from coast-to-coast. For this we are indebted to the nation's airlines.

"It is gratifying to us that the Air Transport service is growing more comprehensive month after month."

AIR TRAVEL IS NOT EXPENSIVE

Many companies consider Air Travel the key to more efficient business—better results at less cost.

First, because Air Travel costs no more than fastest first-class ground travel, when all expenses are considered, sometimes even less.

Second, because trips are 'shorter' by air, your men spend less time on the road, which means fewer



This endorsement given without compensation

overnight journeys and less travel expense, with more time for productive work. They gain hours, days, and even weeks, depending on the length of the trip.

And third, men who fly not only cover their territories quickly and efficiently but do so with a minimum of travel fatigue.

Why not phone your local Airline office and have a representative call and explain how Air Travel can benefit *your* business!

AIR TRANSPORT ASSOCIATION
135 South LaSalle Street, Chicago, Illinois

This educational campaign is sponsored jointly by the 17 major Airlines of the United States and Canada, and Manufacturers and Suppliers to the Air Transport Industry.

FLY

IT PAYS TO

AIR EXPRESS is "Telegraphic" Package Service. All domestic and international airliners of the U.S. carry Air Express. Low rates include special pick-up and immediate delivery. A five-pound package delivered 2,600 miles, *overnight*, costs only \$4.80. Call Air Express Division, Railway Express Agency, for service, rates or information.

same time been undercutting educational and welfare standards.

Techniques for analysis and mechanisms for government improvement have been worked out. Application is the rub. How to capture and hold citizen interest? How to bring taxpayers and officials together in something more like a round table pow-wow than a prize fight? How to make research findings interesting and applicable? How to make people realize that the other face of "taxes" is "expenditures?"

Various these problems are being worked out. Officials and citizens are learning how to share their common difficulties. Significant about the whole thing is the upsurge of interest. Over large parts of the world, the citizen dare not find fault with his Government.

As yet in America men do not have their heads chopped off for making critical examinations of Government. We believe that democracy will have virility and a place in the sun so long as the citizen insists on keeping narrow the gap between himself and his government. If his many associations, leagues, councils and unions persist, if they build on a broad non-partisan base, if they shake down into something more than hard-times tax-slashing agencies, if they team up with the research experts and learn to think of services as well as costs, they will become what the Sloan Foundation and Denver University envisage, a genuine fourth-estate for government.

U. of M. Offers Research Aid

RESEARCH facilities for business men comparable to those offered by experimental and research stations in agriculture and engineering will be made available at the University of Minnesota through the first government sponsored regional business research station. New establishment will act in close collaboration with the University School of Business and with the regional office of the Bureau of Foreign and Domestic Commerce.

One of the main purposes of the station, as announced by Dr. Will F. Kiskick, is to provide a research service readily accessible to small business men.

On the station's advisory council are University men and leaders in finance and industry. Council supervises research activities. Chairman is Dean Russell A. Stevenson, of the University School of Business. Members include: Guy Stanton Ford, president of the University; Dr. Roy G. Blakey, professor of economics; W. C. Macfarlane, president of the Manufacturers Association of Minneapolis, Inc., and of the Minneapolis-Moline Power Implement Company; Milton W. Griggs, president of Griggs Cooper and Company; Oliver S. Powell, first vice president of the Federal Reserve bank; Silas M. Bryan, manager of the Minneapolis office of the Bureau of Foreign and Domestic Commerce.

Corn Cob Pipe Graduates

(Continued from page 32)

pipe lengths and throws away the waste.

Surprisingly enough, properly aged cobs are tougher than most hardwoods and the wood turner handling them must take every precaution not to burn his tools. The bowls are machine bored and, after being placed on spindles, are filled with plaster to plug the pores. The white sanders, as one group of workers are called, polish off the roughness before the first coat of shellac is applied. Tops and bottoms are then polished, the stems fitted, and varnish applied.

Formerly, the stems of a large percentage of corn cob pipes were made from Weishel wood—a stunted, non-bearing cherry tree found in Austria—but European developments have so complicated its importation that synthetic plastics and woods more readily obtainable are now being used.

Begun in 1869, the plant Mr. Otto directs has facilities for turning out 20,000 pipes a day in various styles.

A few years ago, R. M. Strutz, third generation president of his family's pipe factory at Boonville, Mo., began casting about for ways to increase sales. After talks with pipe smokers, dealers, and jobbers all over the country he concluded that his market could be improved by dolling up his product. Many pipe devotees thought it too crude and undignified for every-day use.

E. J. Steuterman, a technical engineer, was handed the assignment and within a short time evolved a coated model embodying the comforts of the cob smoke and the appearance of a briar. Another innovation that's had a vitalizing effect on sales has been an underslung model with a detachable filler, which can be changed periodically. Still another style that's been gathering sales momentum within recent months has been a medium-sized untreated cob pipe retailing for a nickel.

Your Secretary Is a Lady

(Continued from page 25)

utive; to the worker and from the worker. The lowest in the organization as well as the highest should always have access to the top executive if he thinks he has a matter worth attention, even if it turns out not to be sufficiently important for the executive's decision.

9. Never give a worker more responsibility than you are prepared to give in corresponding authority necessary for the task.

10. If you must discharge a worker, do so not on the basis of personal failure, but on business expediency, and never break a worker's morale, or use hard, angry words. Part with good wishes, regrets and with as much constructive, helpful suggestion as possible.



"Take a tip from me—

I'LL TELL YOU HOW TO BOOST SALES!"

"BUSY? I'll say I am since they remodeled the place. I'm getting more tips now, and the boss is getting more customers. So take a tip from me, it always pays to dress up."

This lady knows what she's talking about, and *your* business is no different in this respect. It pays to modernize, and it pays to start with a sales-attracting floor of

Armstrong's Linoleum. For here's a floor that offers color and smart design. Here's a floor that saves cleaning time, cuts maintenance costs, and stands up under constant heavy traffic.

Ask your linoleum merchant for first-hand facts, and write for our color-illustrated book on better floors for better business. Sent free (outside U.S.A. 40¢). Armstrong Cork Company, Floor Division, 4104 Coral Street, Lancaster, Pa. (Makers of cork products since 1860)



PUT YOUR BEST FOOT FORWARD with a smart Armstrong floor like the one shown above in the Petersen Bakery and Restaurant, Omaha, Nebraska. No matter what your business, a floor like this will help boost sales and lower your maintenance costs.

MAKE CUSTOMERS RETURN to your restaurant, shop, or store. A gay Armstrong floor will help you do this. The floor shown here is proving a good investment for Miller's, Inc., Cafeteria, Knoxville, Tennessee. Why not put an Armstrong floor to work for you?



ARMSTRONG'S LINOLEUM FLOORS

Custom-Laid or  Standard Designs

PLAIN • INLAID • EMBOSSED • JASPÉ • CORK TILE • ASPHALT TILE
RUBBER TILE • ARMSTRONG'S LINOWALL and ARMSTRONG'S QUAKER RUGS

Politicians "Helped" Washington's Army

By SIMPSON M. RITTER

LONG marches, infrequent, scanty meals, and insufficient rest are conducive to sick headaches and inefficiency. General Washington's army in 1777 was no exception to this rule. A little Scottish physician, Struman MacDanald, suggested that a quantity of "love apples"—tomatoes to you—be procured. This was a bold step because "love apples" in that day were deemed poisonous. They were eaten

only—after proper incantation—by the lovelorn in the hope of bringing closer their object of affection.

Dr. MacDanald claimed to have experimented considerably with tomatoes on his Pennsylvania farm and to have found them beneficial. Washington and his staff ate tomatoes for a week to test the truth of MacDanald's claim. They found that tomatoes apparently dissipated "vapors" and al-

though they'd never substitute for sleep the sleepless soldier felt less groggy with a tomato resting in his stomach.

A courier rode to Congress with an order to provide Washington with either enough tomatoes to ration every soldier one every other day or to provide enough money to buy the vegetable. Congress blinked and wrote back asking the General what was the meaning of his request. Love apples were poisonous and cost three to four shillings each because farmers were afraid to raise them. Did he mean to poison his command or had he a plan to poison the British army?

In reply, each man on Washington's staff prepared a "testimonial" on the virtues of the tomato. Armed with a sheaf of these MacDanald departed to argue with the Congress.

Two years to get tomatoes

ALTHOUGH Washington's first request for the tomatoes was made in March, 1777, he got no appropriation until July of 1779. A mixed congressional-medical committee took that long to repeat MacDanald's experiments and come to a decision.

In August, 1777, Washington found himself once more short of uniforms. They were sorely needed. Because of their lack detachments of his men on scouting duty were often mistaken by their mates for armed Tories and fired upon. In pitched battles the lack of identification brought confusion. Furthermore most of the men were in tatters and they might as well have encouraging uniforms as any other garb.

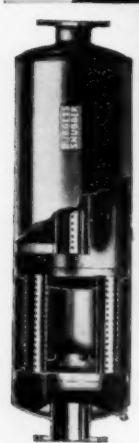
The General forwarded to Congress specifications for the 19,000 uniforms he estimated as needed immediately. Without consulting the commander-in-chief or any other military man, a congressional committee on supplies reduced the number of uniforms by one third to compensate for the recent rise in the price of cloth. Congress reluctantly passed the bill but, also having heard of the price increase, cut the number of uniforms in half again. That left some 6,000 uniforms.

The contracts were farmed out to 28 firms. Evidently each firm had its own definite ideas on what the well dressed revolutionist should wear. No one checked the work of the firms for design or to assure the use of good quality cloth and workmanship.

Early in February, 1778, the uniforms reached General Washington somewhere in Maryland. Not only was it necessary to discard 1,300 as shabbily made but the American Army found itself with 28 different types of uniforms to add to the medley already existing.



Diesel-operated municipal power stations, like this efficient plant powered by Fairbanks-Morse engines at Lamoni, Iowa, can be built near residences if Burgess Exhaust Snubbers are used to prevent noise.



Sectional view of Burgess Snubber, showing snubbing chambers.



Diesel engines in oil field service are free from exhaust noise when equipped with Burgess Snubbers.

Diesel motorships, like the cargo liner "Mormacpenn," use Burgess Spark Arresters-Snubbers to provide sparkless and quiet engine exhausts.

Now - Enjoy Diesel Power Advantages without Exhaust Noise Complaints

Perhaps you are thinking of installing a Diesel engine, but you are afraid of getting complaints about exhaust noise. If so, you will be surprised to learn that a new principle of Diesel exhaust quieting... introduced by Burgess in 1939... has done away with noisy exhausts.

Today, exhaust noise is not "muffled"; it is "prevented" before it starts. The Burgess Exhaust Snubber converts the

fast-moving slugs of vented gases into a steady, quiet flow. There is no explosive impact with the atmosphere to cause noise.

Thousands of Diesel engines, equipped with Burgess Snubbers, are operating in office buildings, stores, ships, and residential areas without noise complaints. Any Diesel engine you may buy can give the same noise-free service. Let us send our bulletin "Snub the Slug."

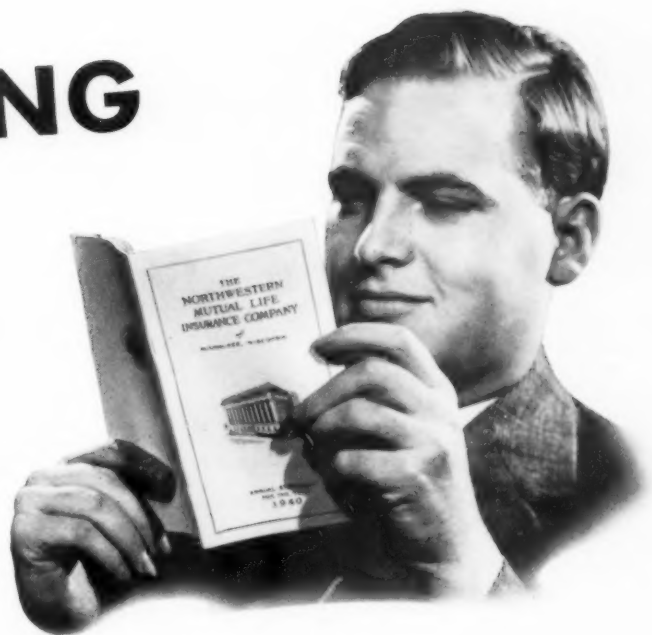


Burgess Battery Company, Acoustic Division, 508 W. Huron St., Chicago, Ill.
Originators of Snubbing Principle for Quieting Diesel Exhausts—Pat. and Pats. Applied For

BURGESS SNUBBERS

GOOD READING

FOR THRIFTY AMERICANS



Some significant excerpts from the Northwestern Mutual's annual statement—significant to you in determining where to buy your next life insurance:

"An active management if frank with policyholders will—at the end of each year—give them the results for the year and the condition of the company; and frankness requires that they be given the unfavorable news as well as the favorable news."

"Payments to policyholders and beneficiaries: \$108,149,861 . . . The continued upward trend in the practice of paying policy proceeds in income installments is one of the most significant developments of recent years . . . Ten years ago this company issued 38,191 checks annually" . . . on such installment settlements. "During 1940, a total of 193,291 checks for this purpose were issued . . . Northwestern Mutual agents are zealously bringing the company's facilities for income settlements to the attention of policyholders."

Terminations. "The amount of insurance voluntarily terminated by the policyholder during 1940 . . . was only 3.23% of the total in force at the beginning of the year. This was the smallest percentage in many years" and was a record in which The Northwestern Mutual is unsurpassed.

Bond Investments. "The market value of all bonds was \$827,020,902, or \$30,679,525 greater than the admitted asset value . . ."

"The bond account may, in our opinion, be viewed with satisfaction. The expanding industrial activity has been favorably reflected in earnings of the companies whose obligations we hold, and our security is hence of increasing value. The total admitted asset value (at market value) of all defaulted bonds is \$11,323,110, which is less than 1% (.883%) of total admitted assets."

Mortgage Loans. "Indicative of the improvement in the ability of the borrower to meet his obligations under mortgage loans is the fact that out of over 18,000 mortgage loans of all types now on the books of the company, there are but 70 foreclosures pending."

"Real Estate acquired through foreclosure and unsold . . . had an asset value of \$38,720,662 or 2.85% of assets."

"General Surplus or Contingency Reserves were . . . \$5,083,113 for mortgage loans and \$62,048,010.53 for general contingencies—an increase of \$9,844,781.53."

Interest. "The interest rate showed a further downward trend in 1940. The average net rate earned was 3.70%, or 3/100 of 1% lower than 1939 . . . Unsatisfactory as the rate of interest is, it is well to remember that it offers no threat to the solvency of life insurance companies."

Mortality. "6,547 death claims were received . . . Mortality experienced was satisfactory . . . All policies now in force have no war restrictions and require no extra premium."

Operating Expenses. "Taxes absorbed 2.6% and the salaries of 1,774 persons on the Home Office payroll amounted to 2.2% of the gross premiums. The company's total salary cost amounted to 73 cents per \$1000 of insurance in force."

Dividends. "Favorable mortality and economy of management have justified an aggregate allotment of \$33,400,000 for distribution in 1941."

Insurance in Force. 1,068,549 policies—the largest number in the company's history—for \$3,948,732,732. Admitted assets \$1,358,999,648—an all-time high.

"The Northwestern Mutual is a purely mutual company—there is not and never has been any capital stock ownership. It is an enterprise owned solely by the policyholders. Its business is and always has been the writing of standard, ordinary life insurance in which every applicant is medically examined and carefully checked on the factors of risk. It does not issue Substandard, Industrial, Group, Non-Medical, or other special plans."

For further information write for a copy of the complete Annual Report or consult with any Northwestern Mutual Agent.



We are **THE NORTHWESTERN MUTUAL**
LIFE INSURANCE COMPANY
MILWAUKEE, WIS.

NO BUSINESS *Can Escape* CHANGE

Though priorities and defense work may slow down deliveries, there'll always be a change

1 • A NEW chemically made fabric has now been adapted to thread for home sewing by hand or machine. It is non-lustrous to blend with other fabrics. It has great strength and elasticity, thus decreasing the danger of breaking stitches at seams.

2 • A PORTABLE window-type air-conditioner for air-conditioning a single room at a time is now made with a capacity of 5700 BTU. It provides for controlled ventilation, acoustical treatment to subdue outside noises, and a mixture of outdoor and room air in any proportion desired.

3 • A COMBINED pressure reducing valve for hot water heating of homes and for domestic hot water service holds down excessive city water pressure to a uniform force and has a check valve to prevent hot water backing up into the cold water system.

4 • TO PROTECT the morning milk delivery against the weather, accidents, and cats and dogs there is a simple bracket which holds a bottle firmly by the neck on the door or wall. The bottles are easily fastened, and taken down, but cannot be accidentally dislodged.

5 • A TRAILER for handling boats up to 16 feet in length is designed for one-man control. Hand lifting is not necessary: a winch is used for loading and to pull the loaded trailer up embankments. Capacity is 500 pounds.

6 • A NOVEL stretching tool for steel strapping shipments grips the edge of the strap without the foot or base of the tool being under it. Wide strap may be applied to non-compressible commodities with considerable tightness.

7 • NEW absorptive lenses for glasses eliminate practically all the infra-red as well as the ultra-violet. They are of high optical quality although made without power for sun glass use only.

8 • A CENTRIFUGAL pump of chemical-resistant glass is now made in a small size to handle 10 gallons per minute. All parts touching the liquid are glass and fully transparent. It handles hot acids or brine-cooled liquids with equal facility.

9 • FOR HAND type fire extinguishers there is now an easily applied seal which is broken when the extinguisher is removed from its bracket. Absence of the red seal shows at a glance that the extinguisher should be inspected and refilled.

10 • TO MEASURE the thickness of sheet steel when only one side is accessible there is a new magnetic gage. It is especially valuable for checking center and other points of wide sheets of steel. It is accurate to one-one thousandth inch.

11 • A NEW instrument analyzes oxygen in any gas and gives a continuous graphic recording. No chemicals are used. It operates from the electric supply line. It is adaptable to analyzing furnace atmospheres, stack gases, and other uses.

12 • A HIGH temperature lubricant for use in bakers' ovens and the like up to 1800 degrees Fahrenheit is micronized graphite suspended in a fluid which is odorless and leaves no gum or carbon.

13 • NEW recording thermometers of the liquid filled type are available in ranges up to 400 degrees Fahrenheit with 200 feet or less of connected tubing. The design gives higher sensitivity and is considerably stronger.

14 • FOR painters there is a new mixing sealer which enables the painter to turn a flat wall paint into a tight under-

coater for enamel or into a pigmented wall sealer. It can be used also as a reinforcing vehicle for outside semi-paste paint.

15 • A NEW wrinkle enamel finish is applied in one coat without primer, can be baked at different temperatures and times with matching finishes, has good adhesion, withstands salt spray and humidity. It can be used on different metals and even on wood.

16 • FOR an outdoor cooking fireplace there is now a unit that has a stove-type top. Inexpensive and ready to be built into the masonry, it is of cast semi-steel, has a top of one by two feet with two stove lids, has a grate adjustable for burning wood or charcoal.

17 • FOR ship bottoms there is now a red lead paint which is quick-drying, hardens, and stops rust under water. It can be submerged in six hours, is economical in dry dock time.

18 • SALT shakers are now made with a diatomite filler in the neck to remove the moisture from the air. Result, it is said, is dry salt free to run smoothly.

19 • SHOWER curtains made of a new synthetic fabric, either transparent or opaque, are highly resistant to soil and wear. They are not coated, will not crack, peel, rot, or mildew, or stick together when wet.

20 • LENSES for safety goggles of one type are now said to be made of quite uniform strength to withstand up to a three-ounce weight dropped from a height of 54 inches.



21 • A NEW plant food for application with the water when sprinkling has balanced mixture of chemicals and hormones and vitamins. Prepared in powder form, it is easily dissolved in water for application, is said to help all plants. It is odorless.

EDITOR'S NOTE—This material is gathered from the many sources to which NATION'S BUSINESS has access and from the flow of business news into our offices in Washington. Further information on any of these items can be had by writing us.

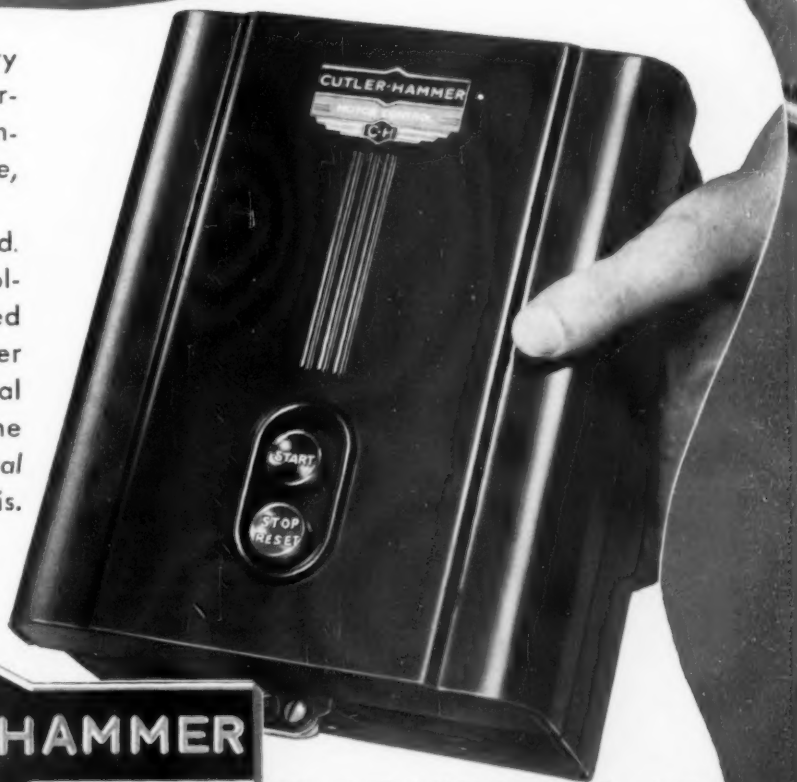
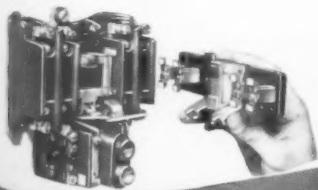
Doesn't It Beat All How DIRTY Things Get!



THE annual spring cleaning which is a bane in every housewife's life, is mute testimony to a fact of far-reaching significance to factory executives and maintenance men. *Dust is everywhere, gets in everywhere, and settles on horizontal surfaces.*

Dust is a destroyer where Motor Control is concerned. Dirty contacts mean trouble. Horizontal contacts collect dust. Vertical contacts stay clean. So, experienced and profit-minded factory men insist on Cutler-Hammer Motor Control . . . the control with dust-safe Vertical contacts. You too insist on Cutler-Hammer, and see the difference. CUTLER-HAMMER, Inc., Pioneer Electrical Manufacturers, 1251 St. Paul Avenue, Milwaukee, Wis.

Cutler-Hammer Vertical Contacts are the mark of better Motor Control, another extra dividend on Cutler-Hammer's unequalled specialized experience and decades of Motor Control leadership.



CUTLER-HAMMER

MOTOR CONTROL



Dust Safe VERTICAL Contacts

ter when
ormones
olved in
odorless.

many
from the
Further
writing us.

1, 1941

★ ★ ★ ★ ★ ★ ★ ★ ★ ★

The Money Markets

By
Clifford B. Reeves

★ ★ ★ ★ ★ ★ ★ ★ ★ ★

Tax Bill Nearly Equal to Profits

IN spite of excess profits taxes and higher income tax rates, many leading American corporations that have issued their 1940 reports show substantial increases in net profits. A few companies reported higher earnings before taxes than in 1939 but lower earnings after taxes. Even in these cases, however, increased taxes did not result in serious damage to earnings.

Corporation reports for 1940 have certainly not justified the recent decline in stock prices. The stock market, affected by a fear psychology and general lack of investor interest, seems to be in a downward spiral that bears no relationship to the greatly improved corporation earnings picture.

Fear that future tax increases may eat still farther into corporation earnings is undoubtedly a factor in the recent action of the stock market. A comparison of the tax bills and net earnings of various corporations in 1940 shows that, if taxes are increased much further, many corporations will be working primarily for Uncle Sam, instead of for their stockholders.

The following table, showing the tax bill and net profits of two large industrial companies and two utilities in 1940, indicates that the 50-50 point is not far off:

	1940 Taxes	1940 Profits
American Tel. & Tel.	\$187,598,000	\$210,497,453
Detroit Edison	10,570,687	10,732,734
du Pont	56,700,000	86,945,173
Chrysler	23,500,000	37,802,279

The Pressure for "Funny Money"

INFLATION controls have proved so effective to date, in the face of larger government deficits, that a number of bolder spirits in the economic field are now suggesting the possible issuance of non-interest bearing Government bonds, unsecured greenbacks and other types of "funny money." More of these schemes will be advanced as discussions proceed as to ways of financing defense and aid to Britain.

The advocates of such unorthodox financial methods contend that such devices, which in the past have always resulted in inflation, are no longer dangerous because of new controls. They point to the way in which Germany, without an adequate gold re-

serve, has financed its tremendous war effort without serious inflationary effects. What they forget is that, to make such a system work, the Government must control all elements of the national economy. Perhaps we could make it work, too—but only by going totalitarian.

One method by which Germany has succeeded in preventing runaway inflation has been by limiting consumer goods purchases and forcing citizens to invest the resulting savings in government securities. That means, in effect, that the Government is telling each citizen how much of his personal income he can spend and what he can buy with it. The next step is simply to tell people what they must give in exchange for the Government's printing press money.

If our Government prints greenbacks, pink slips or other types of phoney currency marked \$20 and gives such a certificate to a worker for his wages, the latter will find that it won't buy him \$20 worth of groceries. To make it work, the Government must threaten the grocer and force him to accept such "wallpaper," at face value, in exchange for his goods at the same prices as before. In other words, everyone must be coerced, and if necessary, punished, in an effort to make it work.

There is no trick to this. This is no "new economics." It is just a new application of the oldest form of larceny in the world. One man can make another accept buttons for diamonds at the point of a gun. But that doesn't entitle him to say, "My system of economics is better than yours. I am using buttons for currency and no inflation has resulted."

High Stock Yields Go Begging

RECORD HIGH yields in the stock market are still going begging. Returns of five per cent to ten per cent on first grade industrial issues find almost no takers even at a time when the burning question is how to make funds produce an adequate income.

Industrial stocks, on the average, are 20 per cent lower than they were a year ago, in spite of the fact that corporation earnings in 1940 showed large increases, and that prospects for industry in 1941 look excellent.

The house organ of the New York Stock Exchange reports that the average yield on all listed stocks in 1940, including issues that paid no dividends, was 5.7 per cent, based on average prices for the year. This is the highest average yield that has existed since the depths of the depression in 1932.

This same study also shows that the dividends paid on listed stock issues in 1940 were the greatest for any year in the past nine. The 1940 dividends totalled \$2,435,000,000, an increase of 13 per cent over the 1939 figure. Between 1930 and 1940, cash dividends paid on all common stock issues listed on the New York Exchange have totaled \$19,650,000,000, which is more than one half of the present market value of all such issues.

Who Pays for Cheap Money?

"CHEAP money" has been the watchword of the Government in recent years. The idea has somehow been engendered that abnormally low money rates are good for everyone. Admittedly, they are a fine thing for any Government that has huge deficits to finance. But what the Government saves, someone else has to pay.

The recent annual report of the Mutual Life Insurance Company of New York, which is now headed by Lewis W. Douglas, former U. S. Budget Director, shows vividly how the average life insurance policyholder is suffering a severe penalty because of the present easy money policy.

If Mutual Life, Mr. Douglas told his policyholders, had been able in 1940 to obtain a net investment return of even four per cent on its assets instead of the rate it did earn, it

SAFeway STORE
DISTRIBUTION WITHOUT WASTE

DOUGLAS

INTERNATIONAL

RCA

NASH

UNION PACIFIC OVERLAND

THE PURE OIL COMPANY, U.S.A.

UNITED AIR LINES

KELVINATOR

KRESGE'S STORE

GE

THE GREYHOUND LINES

US STEEL

STANDARD OIL COMPANY (INDIANA) SERVICE

Uneeded

NOW EVERY BUSINESS can buy a FINE ADDING MACHINE

VICTOR

001
368430
764120
4920707

FOR ONLY \$47.50

Victor's latest portable adds and subtracts. Only \$79.50

If you are "Big Business," you *already* know Victor standard adding machines—are probably using them, like the famous firms whose names and symbols you see above. But you may not know about the remarkable new Victor Portables . . . and you should!

If you are "Little Business"—merchant, grocer, druggist, service station operator, or professional man—then it's very decidedly to *your* interest to learn that Victor Portables now can bring you "adding-machine luxury" for as little as \$47.50.

Victor Portables are the desk-corner assistants of key executives. They circulate from department to department; perch on store counters; help the business man with his home work, or the housewife with her accounts. And they roll out the totals with a precision-engineered speed and quiet that matches their streamlined modern beauty.

Choose the Victor *name* because it stands for twenty-three years of leadership in adding machine development. Then pick the model that fits your business, at a price your business can afford. "Straight" portables in three capacities, with 10-key or full keyboard, \$47.50 and up; with direct subtraction, \$79.50; standard electric models starting at \$114.50.

Let a Victor representative show you how adding machines have "stepped out!" Telephone him today for a free trial. Or write *Victor Adding Machine Co., Dept. N-4, 3900 North Rockwell St., Chicago, Ill.*



Victor standard adding machines have served big business for 23 years. Victor Electrics start at \$114.50.

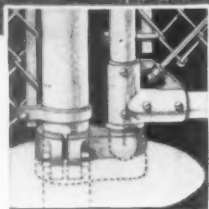
VICTOR ADDING MACHINES



IT'S easy to protect your property from thieves, saboteurs and marauders. Cyclone Fence takes your plant off the prospect list of such dangerous people. They know that this unclimbable barrier, with its high barbed wire top, is too tough to fool with—and that it's sure to spoil a fast getaway.

MOST PLANT OWNERS CHOOSE CYCLONE FENCE for this important protection job—and for good reasons. Cyclone can take a lot of punishment—with practically no upkeep. Strong H-column posts are set in concrete bases that frost won't budge. Spring couplings in top rails compensate for expansion and contraction.

Every part of U-S-S Cyclone Fence is protected from rust. The copper-steel wire mesh is galvanized after weaving, leaving no cracks in the protective coating for rust to get started. Posts, top rails, extension arms, and fittings are also galvanized with a heavy coat of zinc.



A CYCLONE GATE is easy to handle—it doesn't drag. The weight of the gate does not hang on the post. It is supported on a ball and socket hinge set in a solid concrete base.

QUICK DELIVERY

Cyclone service is fast. We can meet almost any emergency delivery requirement. Cyclone makes fence for every purpose—for factories, warehouses, power plants, railroads, schools and homes. Erected by factory-trained men who know their job. Before you buy fence, get the facts about Cyclone. Be sure to ask for a recommendation and estimate.

CYCLONE FENCE DIVISION
(AMERICAN STEEL & WIRE COMPANY)
Waukegan, Ill.

Branches in Principal Cities
United States Steel Export Company, New York

32-Page Book on Fence



Send for our free 32-page book that tells all about fence. Crammed full of facts, specifications and illustrations. Shows 14 types—for home, school, playground, and business. Whether you need a few feet of fence or 10 miles of it, you need this valuable book. Buy no fence until you see what Cyclone has to offer.

CYCLONE FENCE
Waukegan, Ill. DEPT. 541
Please mail me, without obligation, a copy of "Your Fence—How to Choose It—How to Use It."

Name.....

Address.....

City..... State.....

I am interested in fencing: ☐ Industrial; ☐ Estate; ☐ Playground; ☐ Residence; ☐ School.

Approximatelyfeet



CYCLONE FENCE

UNITED STATES STEEL

additional \$14,000,000 would have been available last year for dividends to policyholders. This would have more than doubled the amount available for distribution to policyholders out of 1940 income.

Cases of this sort make it clear that the penalty of abnormally low interest rates is being paid by millions of average citizens who are receiving smaller dividends on their insurance and lower interest returns on their savings accounts and investments.

ALTHOUGH THE Stock Exchange in State of Collapse stock exchange business has been exceedingly poor in recent years,

the attitude of the average stock exchange member has been that "things will get better." The troubles of the Exchange and the dullness of markets were believed to be merely reflections of the country's general economic troubles.

In recent months, however, the country in general has been enjoying a veritable business boom. Instead of reflecting this change, the Exchange finds itself in a worse predicament than ever. Although industrial activity is back at 1929 levels, Exchange seats today are worth only \$26,000 as compared with \$625,000 in 1929.

Exchange members are now beginning to realize that what they are engaged in is not an interim depression, but an actual struggle to prevent the complete disintegration of the stock exchange. Until now, the chief steps taken by the Exchange to offset its loss of business have been reductions in costs of operation; but overhead couldn't be cut fast enough to prevent further losses. In 1940 the Exchange showed a loss of \$981,348, even after drastic economies.

The volume of trading continues to decline, and the Exchange is losing more and more business to the unlisted market. Corporations are beginning to grumble about the unsatisfactory markets for their securities, and it has been reported that some corporations are considering the withdrawal of their issues from the Exchange.

Meanwhile, utter confusion reigns among the membership. So many factions are involved—all with conflicting interests—that attempts to unite them in promoting the good of the whole institution have proved unavailing. What the floor trader wants, the commission broker doesn't want. What the big wire house proposes may be bad for the firm without branch offices.

The plight of the Exchange has become so serious that even the S.E.C. is reported to be concerned about the creeping paralysis that is threatening

the very life of the institution. The S.E.C. knows that organized markets like the stock exchange offer many protections and advantages to the investing public, and the Commission has no desire to see such markets go out of business.

South of Fulton Street, the air is full of panaceas guaranteed to cure all the ills of the Exchange. One proposal is to change the name of the Exchange, call it the Federal or National Stock Exchange, load its board with outlanders instead of Wall Streeters, and then wait for the orders the public will send in.

Increases in commission rates are also being discussed. A recent study of 25 firms, published in the Exchange's house organ, indicated that commissions do not cover the cost of executions and that exchange firms are now being kept alive by the interest received on the debit balances of customers who deal on margin. The study showed that a firm's average cost on each trade was \$9.81, which compares with an average commission of \$7.36 received. The deficit of \$2.45 is more than made up, in the average, by interest received on loans to customers.

The lengthening of trading hours is being seriously considered. A questionnaire on this subject indicated the appalling apathy of the membership. Twenty-three per cent of the active members didn't bother to submit their views on this vital subject.

The retirement of memberships is also being advocated in some quarters as a method of reducing the number of active brokers. Another move has been started to bring about a reduction in the New York State transfer taxes in the hope of bringing back business that has been diverted to other states whose taxes are lower. And plans for splitting commissions with non-member firms have also been proposed.

One definite action has already been taken. In an effort to protect its members against the loss of business represented in the great number of off-the-board sales of listed stocks, the Exchange now requires that notice of such sales be printed on the stock tape at the close of the market, and that syndicates making such offerings keep their books open a half hour to permit exchange firms to subscribe.

A Permanent S.E.C. Chairman?

PEOPLE are beginning to wonder what is the matter with the job of chairman of the Securities & Exchange Commission. By all odds it should be one of the most important posts in the country. The Commission not only regulates all security exchanges, but also super-

The other crisis is over, too!



Seriously injured — but better now, thanks! Hospital and doctor's bills to pay . . . grocery bills, household expenses piling up . . . and the patient is *still* feeling fine. Personal Accident Insurance in Standard of Detroit is caring for the *financial* crisis.

Protect yourself against unexpected disability. A Standard accident policy will help you pay for medical and hospital expenses, provide temporary income, conserve savings, and hasten recovery by relieving financial worries.

This pioneer insurance and bonding company has a 57-year record of prompt, equitable adjustments. See your local Standard agent or broker for this and other forms of protection — against automobile accident, burglary, embezzlement, injury to employees and the public, and similar hazards.

STANDARD ACCIDENT INSURANCE COMPANY

Standard Service Satisfies . . . Since 1884



HOW TO PREVENT DAMP BASEMENTS AND WAREHOUSES



Each year dampness causes millions of dollars in damage to merchandise, machinery and electrical equipment stored or installed in basements or warehouses.

This dampness can be prevented. When building, tell your contractor and architect to specify that all concrete and mortar be waterproofed by using Medusa Waterproofed Gray Portland Cement (or if not available, Medusa Waterproofing Paste or Waterproofing Powder). Medusa Waterproofing forms a waterproof lining in the pores of the concrete or mortar that repels all water at the surface. Water just can't get through Medusa Waterproofed concrete or mortar.

A Medusa Waterproofed plaster coat and floor topping assures protection in existing basements and warehouses. Write today for a copy of the book "How To Make Good Waterproofed Concrete," that tells how Medusa Waterproofing with its 34 years of successful service can prevent water damage in your basement or warehouse.

MEDUSA WATERPROOFINGS

**MEDUSA PORTLAND
CEMENT CO.**
1016 Midland Building., Dept. A
Cleveland, Ohio
Gentlemen: Please send me a copy
of the book "How to Make Good
Waterproofed Concrete."

Name _____ Address _____
City _____ State _____

Medusa Products also made in Canada by Medusa
Products Co. of Canada, Ltd., Paris, Ontario

vises the issuance of all new publicly offered securities, regulates the entire public utility industry and all investment trusts, and has many other duties that, one way or another, give it great influence over American business.

Although the chairmanship of this important government agency should be career enough for any man, no one seems to consider the job as anything but a springboard to some other post.

The resignation of Jerome Frank as chairman of the S.E.C. and speculation as to his probable successor bring to mind the fact that the new appointee will be the fifth chairman that the Commission has had in less than eight years of its existence.

This has been extremely trying on financial and business executives who have constant dealings with the S.E.C. As soon as a new chairman has begun to learn his job, and just when financial people are beginning to understand his views and philosophy, he resigns to become a judge or ambassador or dean of a law school and is succeeded by someone with entirely different points of view. For this reason, it is fondly hoped, particularly in the investment business, that the next chairman, whoever he may be, will regard his job as permanent.

By a strange coincidence, it is probable that a new president of the New York Stock Exchange will also have to be appointed because of the expected resignation of William McC. Martin who will probably be called into military service. Financial people feel that it would be a fine thing if the S.E.C. chairmanship and the stock exchange presidency could be filled,

after conference between the Government and the Exchange, by two men who could work together harmoniously.

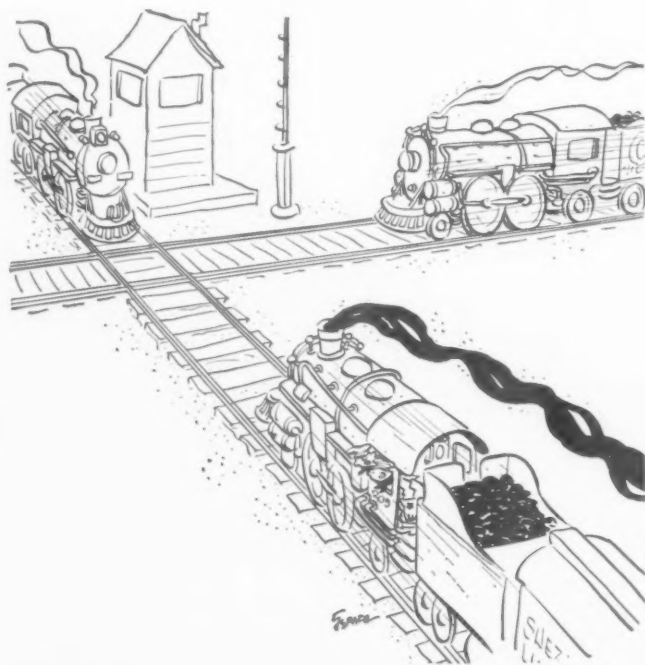
Jitters in the Bond Market

A SUDDEN fear that existing low money rates may not last has seized both institutional and individual investors in recent weeks. The result has been heavy liquidation and a sharp decline in the market levels of Government, municipal and corporation bonds.

Nearly all of the new bond issues offered in the past several months have sunk below their original offering prices, and dealers have found that the most recent issues were difficult to distribute. Consequently, many new issues that had been scheduled for public offering were postponed until the entire bond market could recover from a severe case of indigestion.

This condition is causing a good deal of concern in government financial circles, where it is felt that any further decline in the bond market might seriously jeopardize the Treasury's chances of financing the defense program at reasonable cost. The financial district expects that the Treasury, because of its great need for a stabilized bond market, will take positive steps in the near future to arrest the fear psychology that has recently unsettled the price level.

The new taxable bonds to be offered by the Treasury in an effort to attract the funds of individual investors pose a neat problem of pricing. To interest individual investors in such offerings,



"By Heaven, this is dramatic. You know it!"



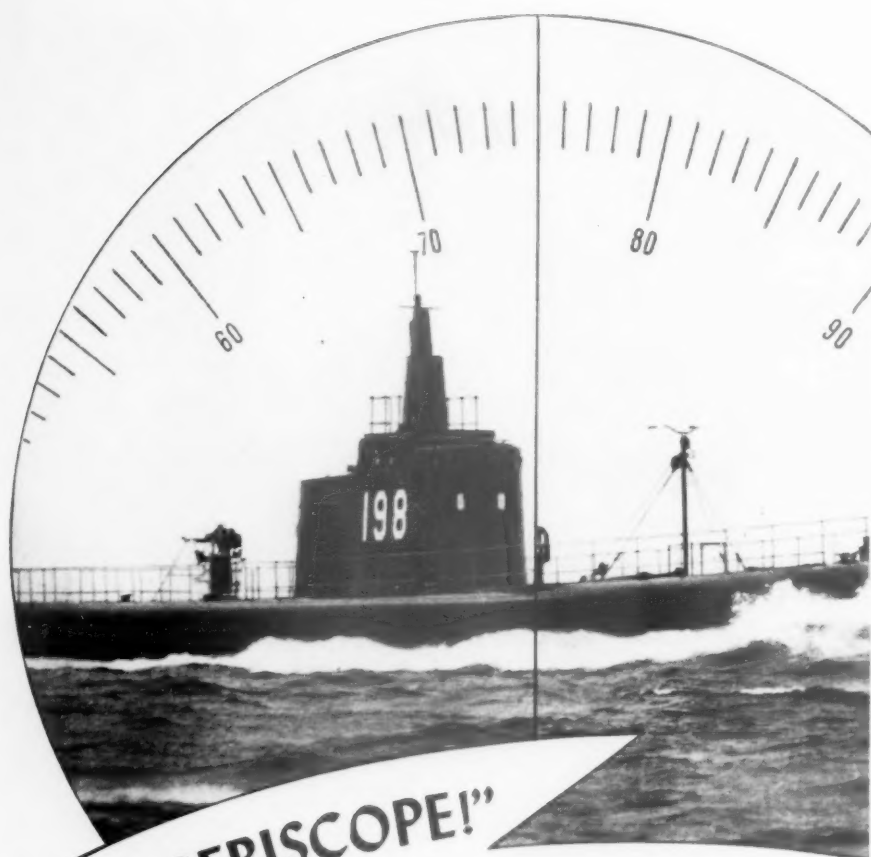
**Our Profits Jumped When
WE OPENED OUR
ILLINOIS BRANCH!**

"...we had been neglecting one of America's richest markets
—and there is more to this story than merely being right in the center
of the huge Middle West consuming market. That is important, of
course, because we can make overnight freight deliveries to dealers
serving a population of over fifty million. Not only have we cut distri-
bution costs to the bone, but we effected production economies
through proximity to raw materials and low cost Illinois fuel and
power. The availability of skilled labor is an added profit factor."

Have you investigated the profit possibi-
lities of a branch plant in Illinois for your
business? Whether the market for your prod-
ucts is the ultimate consumer or industry,
the State of Illinois offers exceptional ad-
vantages and opportunities. By locating
your plant or branch plant in Illinois, you
will gain: central location; direct transpor-
tation to every part of the Nation; an abun-
dant of raw materials; ample low cost
power and fuel; good labor; abundant
water; and other important profit factors.

Write the Illinois Development Council at
Springfield today, for a special confidential
report on the advantages Illinois offers your
business. Please list any special or unusual
requirements in raw materials, labor, power,
transportation, or any other production or
distribution facilities, in order that a truly
practical and informative report may be
submitted for your consideration. Your
inquiry will, of course, be kept strictly con-
fidential. Write—ILLINOIS DEVELOPMENT
COUNCIL, STATE HOUSE, SPRINGFIELD, ILL.

ILLINOIS
THE STATE OF BALANCED ADVANTAGES



"UP PERISCOPE!"

UP PRODUCTION!

(Above) U. S. S. "Tambor," first of her class to be delivered to the Navy—as you'd see her from a sister ship . . . To meet huge Navy orders, over 4000 of the nation's most skilful ship-builders keep Electric Boat Company's Groton, Conn. plant humming 24 hours a day. Shops and yard are cracking records for speed and efficiency. So that office and executive capacity may keep pace with production strides, Electric Boat Company has just installed Ediphone Voice Writing.



UP EFFICIENCY, TOO! In National Defense industries . . . in offices . . . wherever it's necessary to break through the bottleneck of business detail—you'll find Thomas A. Edison's Ediphones doing their part. *Surveys show that the average executive increases his capacity an hour a day by dictating his data, correspondence and details to an Edison Voicewriter.* To try a new, streamlined Ediphone simply phone "Ediphone," your city. And write Dept. N4 for free booklet, "Re-Arm The American Executive."

**EDISON
VOICEWRITER
Ediphone**

Thomas A. Edison, Inc., West Orange, N. J. or Thomas A. Edison of Canada, Ltd., 610 Bay St., Toronto

the Treasury will have to provide a generous yield. But the yield on highest grade taxable corporation bonds is already down to 2.75 per cent or less. If new Government issues are offered at much less than this yield, the average investor will not be interested, and such offerings will fail to accomplish their purpose. On the other hand, if the Government offers securities near, at or above the yield of high grade corporate issues, the latter, on the basis of comparative values, will probably decline sharply in price, thus unsettling the entire bond market.

Government Bill In Press Time

SIZE of the sum required to pay expenses of the federal Government for next fiscal year is graphically shown by time consumed in printing equivalent amount in dollar bills. If a printing press had begun turning out dollar bills at rate of one a second when Columbus first landed in the New World and had produced at same rate ever since, total would still be \$3,000,000,000 short of estimated expense figure. Comparison, made by Guaranty Trust Company of New York, is based on official budget estimate that expenditures of federal Government in fiscal year 1941-42 will total more than \$17,000,000,000.

Continuing the comparison, the bank asserts that, if 17,000,000,000 dollar bills were laid end to end, they would extend 1,643,387 miles, or 66 times around the earth at the Equator. Putting it astronomically, the same dollar bills would form six strands reaching from the earth to the moon, with more than \$2,000,000,000 to spare.

Getting down to buying-power, 17,000,000 automobiles priced at \$1,000 each could be bought with the same amount, one car to every eight persons, or every two families, in the United States. Placed bumper to bumper, these cars would form a line approximately 16 times the distance from New York to San Francisco.

Seventeen billion dollars would pay for the building of 335 battleships like the Missouri and Wisconsin, now under construction at a cost of \$50,700,000 each, equivalent to more than 22 times the available United States battleship fleet and more than eight times the number of battleships now in service in the major navies of the world, exclusive of our own.

Seventeen billion dollars means an average of \$129.11 for every man, woman and child in the United States, or more than \$500 for each family of four. Annual interest on \$17,000,000,000 at 2½ per cent totals \$425,000,000, what it cost to run the entire Government 50 years ago. To earn this interest, the 48,400,000 employed workers of the country would have to work nearly two days each year at \$5 a day. To pay the principal, each one would have to work 70 days at the same rate.

Political Lines Shift in States

DEMOCRATIC members of the 48 state legislatures, most of which convened in regular session early in 1941, outnumber Republican legislators 4,198 to 2,952. Nineteen states have Democratic governors with both state legislative bodies in control of Democratic majorities. Twelve states have Republican governors and Republican majorities in both houses. Wyoming has a Republican governor and Senate with the House membership divided equally.

The 19 states with the chief executive and legislatures under Democratic control are Alabama, Arizona, Arkansas, Florida, Georgia, Idaho, Kentucky, Louisiana, Maryland, Mississippi, New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Utah, Virginia, and West Virginia. The 12 states with Republican governors and Republican control in both legislative bodies are Delaware, Illinois, Iowa, Kansas, Maine, Massachusetts, New Hampshire, Ohio, Oregon, South Dakota, Vermont, and Wisconsin.

Indiana, Michigan, New Jersey, New York and North Dakota have Democratic governors but both legislative bodies are dominated by Republican majorities. Missouri and Washington, with Republican governors, have Democratic legislatures. California, Nevada, and Rhode Island have Democratic governors and Democratic control in their House of Representatives but their Senates are Republican.

Colorado reelected its Republican governor, retained Republican control of the House and cut the Democratic Senate majority from 11 to one. Connecticut has a Democratic chief executive and Senate but the Republican majority in the House is approximately 100. Pennsylvania and Montana have Republican governors and State Senates with the lower House in control of Democrats. Minnesota and Nevada elect their state legislators without party designation.

In 28 states the chief executive is a Democrat and 20 have Republican governors. Democrats and Republicans each control the Senate in 23 states. In 26 states there are Democratic majorities in the House of Representatives and in 19 states the lower legislative bodies are under Republican majority control. The House membership of Wyoming is equally divided. Two states elect non-political legislatures.

Because the political complexion and composition of state legislatures is important to interests outside the electorates immediately concerned, The Directory of State Lawmakers, a Texas institution, compiles and publishes biennially the names, home addresses, and party designations of all the members.

All Legislatures met in regular session in January, except Florida which convenes in April, and Kentucky, Louisiana, Mississippi and Virginia which assemble in 1942. Alabama group does not meet until 1943.



22,000 REASONS WHY ERIE CAN HANDLE *ALL* YOUR SHIPPING PROBLEMS

• We like to think of our railroad as **MEN**, rather than tracks, locomotives, cars, and other equipment.

Today on the Erie 22,000 men, from car inspectors to traffic managers, are interested—each in his own way—in every shipment that enters an Erie car. It's a hard-working, interested, friendly, helpful personnel—dedicated to one creed, "The freight must go through *safely and on time.*"

*Whatever your freight, wherever you send it, these men constitute 22,000 good reasons why you can trust Erie to handle *all* your shipping problems. Call an Erie man—or write*

Carl Howe, Vice President, Erie Railroad
Cleveland, Ohio



IN MY WANDERINGS I've visited two shoe manufacturing plants of note. One, the second largest in the country, is capable of turning out 150,000 pairs of footgear daily—the other's maximum production in the busy season is two pairs a day!

In this era of mass production, the latter is quite as interesting as the former. It is a one-man plant operated by an 82-year-old Dutchman named Albertus Klungle and it is located in a shed in the yard of his home at Holland, Mich.

This little city on the lake shore is noted for its furnaces, for its population of Dutch extraction, and for its Tulip Festival in the spring which attracts thousands of tourists from Chicago and the Middle West. One of the tourists' recollections of this bustling little city at Tulip Time is the clickety-clack of wooden shoes or *klompen* on the immaculate

Albertus Klungle, 82, operates a one-man shoe factory with a daily production capacity of two pairs

PHOTO BY C. H. GEERLINGS

Seventy Years in the "Klompen" Business

By PAUL W. KEARNEY

pavements. And the dean of the *klompen* makers is grizzled, genial Albertus Klungle.

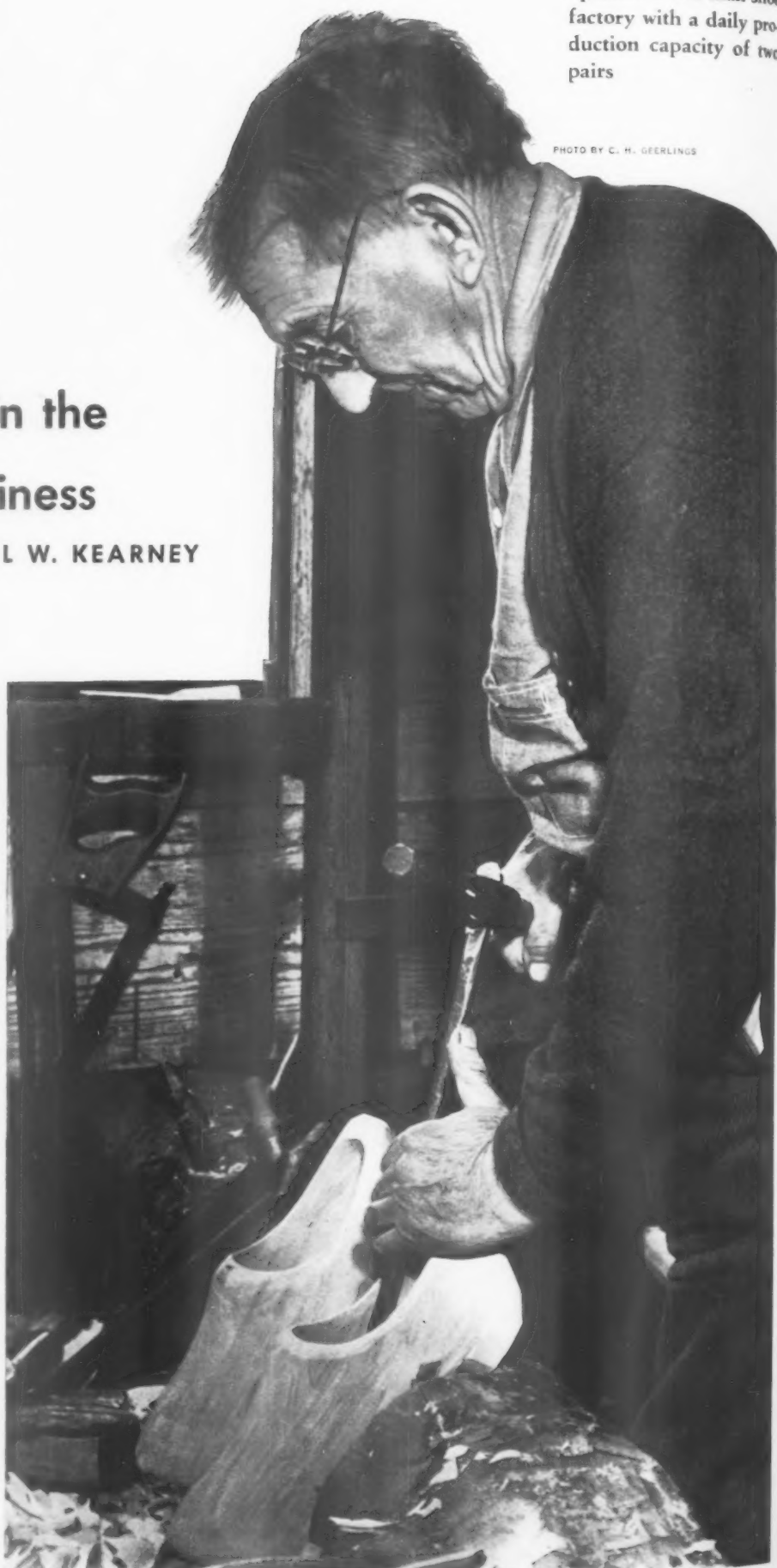
Starting at his trade at the age of 12, the old gentleman has been merrily at it for 70 years. He showed us a pair of delicately carved baby's *klompen* which he made on shipboard for his eldest son when the family emigrated to this country. The child was then only a few months old.

The method and tools used by the wooden shoemaker are exactly those of centuries ago. A soft wood is used, chiefly poplar, which is sawed into lengths of about 16 inches for adult shoes. The lengths are then split lengthwise until they resemble cord wood. With a hatchet, the craftsman roughly outlines the shape; then, with a three-foot long knife he slices off huge slivers of wood until the shoe is clearly formed. This knife is peculiarly fastened at one end to a ring in the workbench.

The shoe is next secured with a wedge and the inside hollowed out with a steel gouge. The trick of gauging sizes and shaping spaces for lefts and rights is mastered only by long experience.

The final touch is a professional smoothing over to complete the finished product. Tying a flat board against his stomach, the shoemaker grips the shoe between his knees and works with a drawshave, using both hands. The stomach board is merely a protection in case the knife slips!

Of course, the venerable Albertus Klungle's product is made entirely for festival wear and souvenir purposes, yet that does not rob them of their romance. Working strictly along the lines set down by his ancestors three centuries ago, the old *klompen*-maker on Lake Michigan imparts a mellow old-world touch to a pell mell age in which both products and ideas are hurled at us from humming assembly lines.





"On Active Duty"

Surely, steadily, the power of this nation to defend itself has emerged from the "preparation" stage; great planes, sturdy tanks, new warships, modern arms are pouring from the crucibles of the national effort.

Less frequently headlined, but also a necessary part of our protection, are blankets, drills, tent cloth, heavy shoes and thousands of other essentials—all vital to a fully prepared, fully equipped America.

Behind this gigantic effort a great army

of credit dollars is mobilized, assuring industry of sufficient funds to meet the demands of our huge national defense program. Today, credit answers this call to service at costs to the borrower lower than ever before in the nation's history.

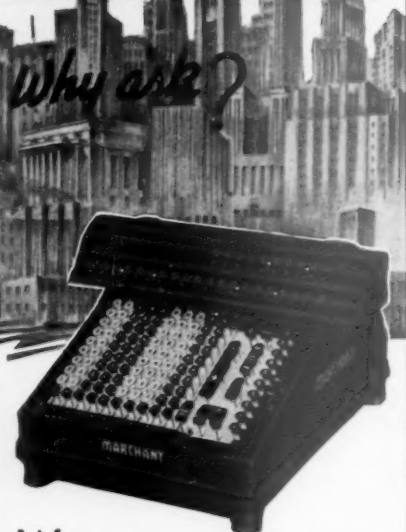
The Chase, aware of the importance of every branch of industry to a productive and united nation, is cooperating in vigorous measure in the financing of defense in its varied phases.

THE CHASE NATIONAL BANK

OF THE CITY OF NEW YORK

Member Federal Deposit Insurance Corporation

BIG BUSINESS OR LITTLE BUSINESS



WHATEVER your business—manufacturing, retailing, engineering... large or small... commercial or professional—MARCHANT has a calculator to fit your requirements as well as your purse.

Models range from the simple hand-operated machine up to the world's most advanced, fully-automatic, all-electric calculator. So, you may implement your business with a

MARCHANT CALCULATOR

to do just the work you want with efficiency and economy.

The smallest model occupies desk space of 6 by 10 inches; the very largest only 11 by 14 inches.

Every MARCHANT is complete.

Every MARCHANT has Dials for All 3 Factors including the key-board entry. This eliminates hunting for zig-zag depressed keys to check accuracy.

Every MARCHANT has Pre-Set Decimals, Complete Capacity Carry-over in all carriage dials, and many other invaluable features exclusive with MARCHANT.

Have you really considered how a MARCHANT might help your business? Why not investigate and learn how MARCHANT CALCULATORS can save you money, time and overhead.

MARCHANT CALCULATING MACHINE COMPANY
HOME OFFICE: OAKLAND, CALIFORNIA, U. S. A.

Sales Agencies and Manufacturer's Service Stations
Give Service Everywhere!



MARCHANT CALCULATING MACHINE COMPANY
1478 Powell Street,
Oakland, California
NB 4 43

Without obligation, you may send data
showing many ways Marchant Calculators
Increase Efficiency and Reduce Figuring Costs.

Form _____
Individual _____
Address _____
City _____ State _____

Red Tape for Lamp Wicks

(Continued from page 76)

workman. He claimed to be an expert internal and external grinder with 15 years' experience. But he hadn't finished high school. Rejected.

Machinist—new style

NUMBER three wore the last thing in unmatched coat and trousers, a snappy yellow sweater with matching woolen gloves and something to congeal the campus in ties. High school graduate, and regularly employed since then for all of six years as a soda jerker. Knew how to be friendly with all kinds of people, and proved it.

"You're the type we're looking for," said the personnel manager. "Fill out this application and wait. I'm sure we can find a place for you."

Multiplicity of operations and jobs often swamps the technical high command and, when the parts fail to fit in the finished product, it is almost impossible to fix the blame. That was true 25 years ago but I believe it is even more so today because the young man who doesn't know now thinks he does. In far too many instances he has the backing of his fellows in the federal bureaus, directly or indirectly. He has memorized excerpts from a lot of the new laws and from innumerable regulations and decisions which fit into his theory of how things should be done. If he is stepped on rudely he is not above appealing to Washington.

Technical training in trade schools and colleges undoubtedly has been a tremendous impetus to American manufacturing efficiency. But, if that training has not been paralleled by actual experience in the shop, it will be of little use for a long time. The late Walter C. White

estimated that college men selected from graduating classes for the special purposes of White Motor were good investments if they began to earn their pay in three years.

Apparently no effort has been made to check up on the free public high schools all over the country sprouting "defense" classes.

Veteran shop men tell me there has been a tremendous rush of applicants from this source, and that the majority of them cannot set up a drill press or a planing mill—of the types the factory is using. Too frequently schools have been teaching "shop practice" on a single machine, generally out of date today or definitely limited in its functions.

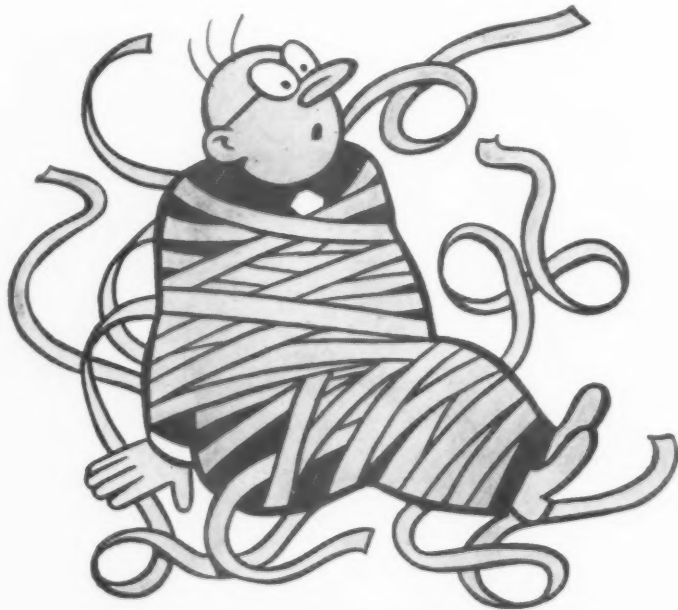
"Give me a kid with a year's experience at a gas station," a veteran Baldwin foreman said to me, "and I'll have him doing a precision job in a tenth the time it takes to unlearn one of these classroom machinists."

Keep out people with pull

REFERENCE to Baldwin's reminds me that it was the late Samuel M. Vauclain who first told me of a system for handling people he had to hire because they had pull. It was simplicity itself.

"Kick 'em upstairs," said the veteran locomotive builder, "or send them to sell engines in Patagonia. It will be cheaper than paying for the mistakes they might make in the offices or shops."

The problem of how to handle blunders is far more difficult today than during the World War. It isn't only the unions and the N.L.R.B. that make the trouble. The bright type of text book technician can get a hearing from any one of hundreds of division, bureau, project and what-not heads in Washington. They can



People who live in red tape can always
be wound up in their own toils

throw all sorts of monkey wrenches into the machinery. Therefore, if the matter is one of employment and the contract warrants it, the best procedure is probably that suggested by Vauclain.

Or perhaps the business man needs a bright obfuscator with a sense of humor who can write long winded, disconnected and even downright dumb letters. These should not argue with the Government. On the contrary, they should flatter the expert with some such statement as that the principle set forth in his letter of the given inst. "appears to us to be too fundamental for the limited application suggested." This may be something so important as the color of report forms, but it won't matter. If the obfuscator can ask enough questions to keep the bureaucrat busy writing answers, the pile of correspondence will soon get so high and the subject so tangled that he will forget what started it.

For harassed executives who may think this an exaggeration let me offer the observation that people who live and work in red tape can always be wound up in their own toils. I know a city editor who takes a delight in doing that to a big utility corporation. He has never paid a bill on time yet never pays a fine. But he does read regulations and fine print and he can write confusing letters. And the utility is efficient.

Considerably more so than the young man in Washington who wrote to the United Fruit Company a year or two ago asking for a detailed description of how the company extracts its banana oil.

Tax Delinquency Makes A Market

TAX delinquent properties are the ever-available stock in trade of a flourishing California business. Everything from country clubs to gold mines and wineries has been deeded the state for non-payment of taxes, including the "ghost town" of Sam'l Posen near Red Bluff, a community of 10,000 city lots in undeveloped range land. The town was laid out nearly 60 years ago. When taxes were not paid, the state took over the entire community.

In similar fashion the state acquired a 13-story office building, two mausoleums, a glass factory, a \$250,000 private school, several large hotels, an ice skating rink, a railroad, an athletic club, a distillery, hundreds of warehouses and homes, and 3,000,000 acres of vineyards, grazing land and forests.

Delinquent property valued at more than \$7,500,000 has been returned in the past three years to California tax rolls through redemption by former owners, and additional property valued at \$800,000 has been sold at public sales to new owners.

Rental of non-revenue-producing tax-delinquent property has yielded about \$375,000 in the past six years—more than enough to pay cost of administering entire procedure for putting tax delinquent property on a tax-paying footing.

You get **ACTION** in Pennsylvania

Ha

Dear Mr. [redacted]

On October 10th of this year this Company decided to establish a branch plant in the East and we immediately set out to find a suitable location. I had read one or two of your advertisements explaining the functions of your Department of Commerce. I therefore stopped at Harrisburg where I met a representative of your staff, who supplied us with a list of unoccupied plants and assisted us daily in making the necessary field contacts until within a week we had located just what we wanted in a building in Allentown, Pennsylvania.

Your printed information together with your representative's knowledge of manufacturing requirements in such cases, formed as complete and satisfactory a service as I have ever encountered. We are tremendously pleased with our plant, our location and to have accomplished in a week or ten days what would normally be a much longer mission.

I want to thank you and your associates for your courteous service. We hope we can return that assistance by being of some value to the State of Pennsylvania.

Yours very truly,

[redacted] PRODUCTS COMPANY

What the Pennsylvania Department of Commerce did for this company, it will do for you. This department was organized to help Pennsylvania businesses to make money . . . and to help companies outside Pennsylvania to locate profitable plants or branches here.

OPPORTUNITIES for your Company in Pennsylvania

The Department of Commerce at Harrisburg will assist you.

1. It finds sites for new plants.
2. It points out lines of business which could profitably be started or expanded in Pennsylvania.
3. It hunts new markets for Pennsylvania businesses.
4. It reports export opportunities.

5. It helps to eliminate trade barriers between states.
6. It cooperates closely with the National Defense Commission.
7. It aids Pennsylvania agriculture by increasing the purchasing power through increased employment.
8. It helps to create jobs for Pennsylvanians.

Write for information.

Pennsylvania

where your business can expand



ARTHUR H. JAMES, Governor • MARK S. JAMES, Acting Secretary of Commerce

IN F-M AIR CONDITIONING *You Get Everything*

✓ Local Engineering Service

Trained factory engineers near you who understand and can fit air conditioning to your local weather conditions.

✓ 111 Years' Engineering Experience

A world-wide reputation in designing and manufacturing precision equipment for over a century.

✓ A Reputation for Quality Only

Quality construction has brought enthusiastic users in every state in the Union.

✓ Local Service


Experienced factory supervised mechanics near you for installation and service.

Only F-M Gives You All These Things

Check with Our Nearest Branch

515 Whitehall Street, Atlanta, Ga.
178 Atlantic Avenue, Boston, Mass.
600 S. Michigan Avenue, Chicago, Ill.
49 Central Avenue, Cincinnati, Ohio
2810 Superior Avenue, Cleveland, Ohio
Corbin & Market Streets, Dallas, Texas
13th & Liberty Streets, Kansas City, Mo.
2401 Santa Fe Avenue, Los Angeles, Calif.
1000 St. Charles St., New Orleans, La.
80 Broad Street, New York, N. Y.
902 Harney Street, Omaha, Nebr.
35 Harrison Street, San Francisco, Calif.
217 S. Eighth Street, St. Louis, Mo.
220-26 E. Fifth Street, St. Paul, Minn.
1226-28 First Ave., South, Seattle, Wash.
1427 Eye Street, N. W., Washington, D. C.

or Clip the Coupon!

 Fairbanks, Morse & Co., Dept. D133
600 S. Michigan Ave., Chicago, Ill.
Without cost or obligation to me, please
have a near-by F-M air conditioning en-
gineer review and discuss our needs.

Name _____
Address _____ State _____
City _____

FAIRBANKS, MORSE & CO.
Air Conditioning Division

Put Yourself in the Envelope

By CHARLES A. EMLEY

A MAN NOTED for his ability to write resultful business letters was recently asked, "How can I make my letters as effective as *yours*?"

"Put yourself in the envelope and seal the flap," was his colorful answer.

I know a brilliant conversationalist who, when he dictates business letters, discards the sparkling diction that helps to make him an interesting talker and drops into that anachronistic letter vernacular which embraces such hoary expressions as, "I have yours of recent date and beg to state," and "Thanking you for your many favors, I am . . ."

Obviously, this man does *not* "put himself in the envelope and seal the flap."

They write good letters

I KNOW two other men, one tall, thin, reserved, studious, the other short, plump, genial, a typical extrovert, who, despite the marked differences

in their physical and mental makeups, invariably write interesting, convincing business letters—and chiefly because each man "puts himself in the envelope and seals the flap." In other words, he writes substantially as he would talk to you across your desk or over the luncheon table, avoiding those trite phrases and expressions which are heritages of antiquity.

Once upon a time I wrote a letter to that famous editor, John M. Sisdall, congratulating him upon an editorial of his which had appeared in the *American Magazine*. Instead of a stilted letter reading, "I have your letter and wish to thank you for your kind remarks, etc.," Sid, as he signed his editorials, wrote:

That was a bully letter you wrote me. If I can't get my hat on when I'm ready to leave the office this afternoon, you will be to blame.

Sid, you see, "put himself in the envelope and sealed the flap."

Perhaps you have heard the story

The weakness of "security"



Dr. Paul F. Cadman, Economist, American Bankers Association

"The socialism of Stalin, Hitler and Mussolini presents a wholesale demonstration of two logical conclusions which the social theorists did not anticipate: first the arbitrary character of any government which exercises the powers of control; and second, the dependence of people who have learned to look to the state for support. The promise of security has lured men from the initiative, self-reliance and independence which have given society its finest qualities. Men have sold their personalities, or their souls, for the illusion that the State is a god who will provide all their needs."

HELPING *Safeguard*

A FOOD VITAL TO NATIONAL DEFENSE



IT HAS been said: "The nation's first line of defense is the health of its people."

The Sealtest System of Laboratory Protection contributes to the nation's health by helping safeguard the purity and quality of those vital foods—milk and other dairy products—in areas served by Sealtest companies.

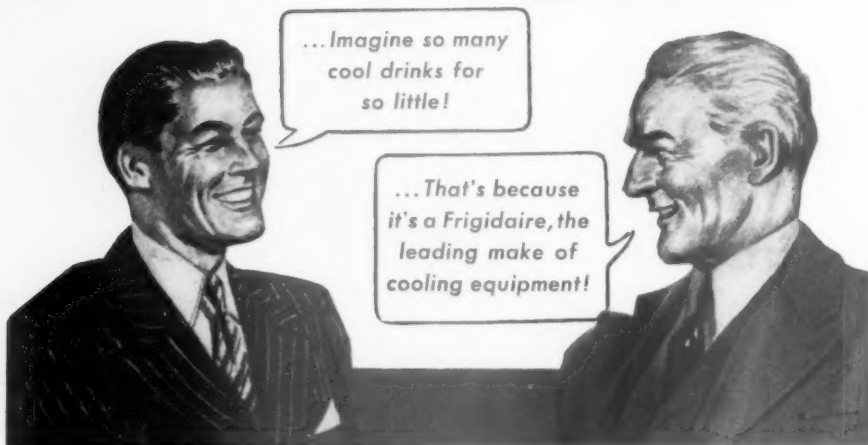
In affiliated dairy and ice cream plants—throughout America—are Sealtest "Men in White"—checking, testing and supervising the products that

carry the Sealtest Symbol. Their knowledge and experience are united in this one closely-knit organization. Their efforts are rigidly checked through one headquarters. The System is led by one of America's top scientists.

This *added* care costs you nothing. So why not let the Sealtest Symbol be your guide in buying milk, ice cream and other dairy products so vital to *your own family's* health?

SEALTEST, INC. AND ITS MEMBER COMPANIES ARE SUBSIDIARIES OF NATIONAL DAIRY PRODUCTS CORPORATION

250 Cool Drinks for less than 1^{*}cent!



New Frigidaire Water Coolers give you amazing Meter-Miser Economy!

● The attractive new Frigidaire Water Coolers are the result of Frigidaire's vast refrigeration experience. Only *they* offer you all these advantages:

Exclusive Meter-Miser, simplest refrigerating mechanism ever built. Rotary principle eliminates pistons, connecting rods, many other parts that cause friction and wear.

5-Year Protection Against Service Expense on Meter-Miser, condenser, refrigerant control, fan motor and cooling unit.

Handsome Appearance, Compact Size. 5 models only 14 $\frac{3}{4}$ " square. Stainless steel top, beautiful design.

Effortless Drinking—"Magic Action" bubbler requires only touch of finger. Foot pedal optional at slight extra cost.

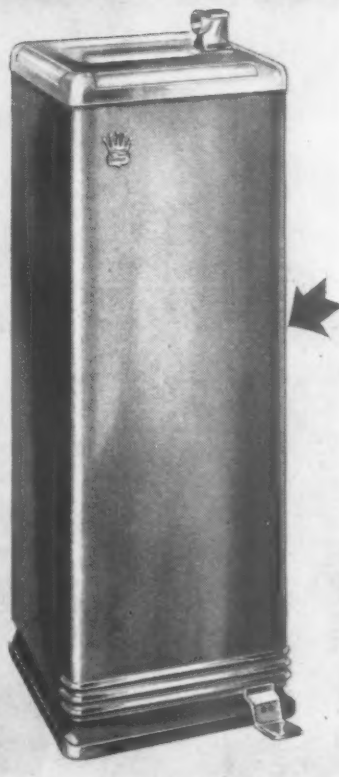
"Self-Serve" Temperatures—Select the water temperature you prefer.

Model for Every Need—A complete line of bottle, pressure and tank-type models.

Surprisingly low-cost—can be purchased and operated for only a few cents a day.

Don't wait! Call in nearest dealer or send for complete Frigidaire Water Cooler catalog today.

*Costs less than 1c to cool 250 4 oz. drinks from 80° to 50° in 80° room, using bottle type cooler and 3c KWH rate. Costs slightly more with bubbler type cooler due to water wastage.



CAUTION! It isn't a genuine Frigidaire unless it bears the "Frigidaire" nameplate. Frigidaire products include: Water Coolers—Air Conditioners—Beverage Coolers—Refrigeration Equipment for all purposes.



Call in the Expert Call in Frigidaire

Send
for
this Catalog!



Frigidaire Commercial Division,
General Motors Sales Corp., Dayton, Ohio
(NB-4)
Please send me free Frigidaire Water Cooler Catalog.

Name and Company _____

Street Address _____

City and State _____

about the ambitious office boy who, while his boss was vacationing, tried his hand at writing a collection letter. This is the letter he wrote:

Unless we receive your check for \$50 by June 6 we'll take steps that will astonish you.

The customer, so the story goes, mailed a check promptly whereas several preceding letters, stiff, formal, abounding in clichés, went unanswered.

Some time ago I wrote to a certain firm for a catalog. The firm's sales manager wrote me that it had been mailed. As it did not arrive within a reasonable length of time, I wrote the sales manager a brief reminder letter. This was his answer:

Why bless you, Mr. Emley, we overlooked sending the catalog!

I passed the carbon copy of my acknowledgment of your letter along to my stenographer with instructions to mail the catalog. She inadvertently sent the letter to file before she mailed the catalog. You don't know how sorry both of us are. I'm sending a catalog with this letter, and I hope you'll find just what you want in it.

It will be agreed that in writing this human, friendly, good-will creating letter the sales manager very neatly "put himself in the envelope and sealed the flap."

Those of us who are entrusted with the job of writing business letters, whether they be important sales letters or simply routine letters, could well afford to study the letters of some of our well known writers.

Here, for example, is a letter written by H. L. Mencken to Isaac Goldberg shortly after the publication of Goldberg's biography of Mencken:

It is manifestly impossible for me to judge your book; you disarm me constantly by your tremendous generosity. But if you thus overrate what I have done, you at least come very close to what I have tried to do. For the rest, I can only congratulate you sincerely on a very remarkable piece of research. It is easy to anatomize the dead; the living are far harder. You strip me of false face, dickie, underwear and fig leaf, and turn me upon the public street.

How to land a job

THEN there is the classic letter written by the inimitable Irvin S. Cobb to several New York newspaper editors in whose anterooms the famous Kentucky humorist had cooled his heels for weeks in the hope that a job would turn up. It reads:

This is positively your last chance. I have grown weary of studying the wall paper design in your anteroom. A modest appreciation of my own worth forbids my doing business with your head office boy any longer. Unless you grab me right away, I will go elsewhere and leave your paper flat on its back right here in the middle of a hard summer, and your whole life hereafter will be one vast surging regret. The line forms on the left; applications considered in the order in which they are received; triflers and profes-

sional flirts save stamps. Write, wire or call at above address.

(P. S. Cobb got a job.)

As a final illustration, we present this letter written by Don Marquis declining office in the "Mark Twain Society":

I am in receipt of your letter offering me an Honorary Vice-Presidency in the Mark Twain Society.

I don't wish to appear unappreciative or ungrateful—but I notice that Premier Benito Mussolini is Honorary President; and if I can't be an Honorary President, like he is, I don't think I want to join.

Is there an office higher than Honorary President? I mean, except President—I notice you are the President yourself, and, of course, I don't expect that. But isn't there an office somewhere in between Mussolini's and yours that I could have; higher than Honorary President, but not as high as President?

If there is, put me down for it. But if there isn't, I'm afraid I can't join—it's not jealousy, really, it's a matter of principle not to let a foreigner like Mussolini have a higher office than mine, even if he is funnier than I am.

While perhaps we can never acquire such epistolary skill as these writers, and many others, possess, by emulating their example we can make our business letters more interesting, more convincing.

Signs Ruled By Laws and Fees

TREND toward more stringent regulation of overhanging signs and displays in business districts is taking shape through municipal actions on broad front. Some cities require permit for each sign or awning and levy license fees to pay costs of regulation; others prohibit use of overhanging signs on specified streets.

Permit fees for overhanging signs in Allentown, Pa., and Cedar Rapids, Ia., are \$2 for each sign, \$1 for awnings. Evanston, Ill., has basic rate of \$3 per sign, plus annual rental fee of five cents per square foot. Fee in Portland, Ore., is \$5 for a temporary sign 42 inches or less in width, \$10 for a sign more than 42 inches wide. Many other cities have comprehensive ordinances governing signs, including Kenosha, Wis., Louisville, Baltimore, and Spokane, where overhanging signs are charged five cents a square foot with minimum charge of \$1.

Regulatory ordinances usually indicate extent, use and safety features which must be observed. Canopies and awnings extending past the building line and hanging over sidewalks generally are considered in same class with signs susceptible to regular inspection and control.

Argument for regulation of overhanging signs is that they may become a danger to pedestrians, especially when exposed to strong winds; that overhanging signs often hamper fire department operations; that lighted signs sometimes confuse motorists when traffic signals cannot be distinguished from background of colors and symbols.



Overtime... usually steps up

overhead... and if mailing means overtime, the Postage Meter usually means a way out... Printing postage is faster than sticking stamps... Machine sealing of envelopes is faster than manual sealing... Meter mailings are never held up by a shortage of stamp denominations... The Meter holds any amount of postage safely, needs fewer trips to the postoffice... Automatic postage accounting takes neither time nor effort... and a Pitney-Bowes Postage Meter soon pays for itself in overtime savings alone... Call our nearest office for a demonstration on your own mail, or use the coupon... soon!...

PITNEY-BOWES

PITNEY-BOWES POSTAGE METER CO.

1327 Pacific St., Stamford, Conn. . . . Branches in principal cities.
Consult your telephone directory... In Canada: Canadian Postage Meters & Machines Co., Ltd.

Pitney-Bowes Postage Meter Co.
1327 Pacific St., Stamford, Conn.

☐ Mail me "The Great Grimblestone Survey"
☐ When may we have a demonstration?

Name

Company

Address



Here's How To EXPAND YOUR PLANT



In A Hurry!

BUTLER

READY-MADE STEEL BUILDINGS

*Less Investment-
Quicker Charge-Off!*



*Install in Days
Instead of Weeks!*



*Readily Insulated,
Heated or Air-Conditioned*

ROUND OR
GABLE ROOF



Sizes 4' x 6'
to 100' Clear
Spans Any
Length



Strikingly
Beautiful
Double Steel
Wall Boule-
vard Buildings



See how completely this 25 year old economy working development in factory fabricated steel structures enables you—to build in a hurry but well—to house space needed for production, storage or servicing—in permanent structures which also are readily taken down and re-located.



FREE! . . . Send Today

for the 50 page Butler Book of Steel Buildings showing a hundred different installations in a score of industries. An outline of your requirements will set Butler engineers to tailor-measuring plans to fit and figures to save 3 ways.

BUTLER MANUFACTURING COMPANY
1240 Eastern Ave., Kansas City, Mo. • 940 Sixth Ave. S. E., Minneapolis, Minn.
SALES OFFICES IN PRINCIPAL CITIES

Jobless Total Cut By Defense

ESTIMATES of the nation's man power become increasingly significant as defense schedules continue to enlarge. Contingent on progressive expansion of program, probability is that demand will exceed supply represented by unemployed workers constituting market. Reasoned judgment to that effect is offered by investigators probing consequences of national labor policy for the Twentieth Century Fund.

Preliminary tabulations of a sample of the Census enumeration taken last year indicate that, in the last week of March 1940, 5,110,000 persons were completely unemployed and seeking work. Adding 1,300,000 who had jobs but who were on temporary layoff and not actually at work, plus 2,905,919 employed on W.P.A. and other emergency work programs, gives a total of 9,315,919.

This figure compares with estimate of 9,269,000 made by the National Industrial Conference Board for the same period.

The Board set the number of full-time unemployed in November, 1940, at 7,217,000.

Accepting this figure as accurate, and deducting the workers on government projects, those on temporary layoff, and those likely to be affected by the draft, the Fund staff concludes that "the number of idle workers in the labor market available for employment in the near future is probably not far from 4,000,000."

On the basis of 1940 appropriations, it seemed reasonable to the investigators to predict an increase in employment of around 6,000,000 between the fall of 1940 and the fall of 1942. Barring an early peace, a large increase is expected in a measure to exceed the available labor supply.

Some will remain jobless

UNEVENNESS in employment will continue despite the sharp upturn in demand with possibly 1,000,000 or 2,000,000 unemployed persons even at the peak of armament production.

Rising trend of employment is likely to continue beyond 1942 and reach a higher peak later.

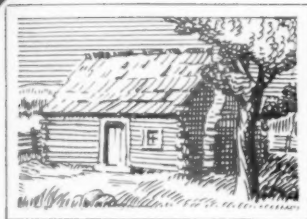
A large part of the increased requirements would look to workers not previously in the labor market.

In view in next two years is a net addition of more than 1,000,000 to the working force through normal excess of new workers over retirements. Several million women workers entered industry in World War period, and this circumstance may be repeated. A considerable reservoir of unused labor exists in agriculture.

Industrial expansion could probably draw at least 2,000,000 persons out of agriculture without reducing agricultural production. Increase in hours worked could also expand the labor force in a vertical gain.



F A M O U S A M E R I C A N H O M E S



Birthplace in Berks County, Pa.

Daniel Boone

THE GRANDFATHER of Daniel Boone was George Boone who came from Exeter, England and purchased large tracts of land in Maryland, Virginia and what is now Pennsylvania, subsequently founding a settlement which he named after himself—Georgetown, D.C. Daniel was born in Berks County, Pa., on November 2, 1734.

Married in August, 1756, he had heard glowing accounts of Kentucky from the lips of John Finley, who had penetrated that country to trade with the Indians; so on May 1st, 1769, with several adventurous neighbors, he plunged into the western wilderness and became the founder of the great state of Kentucky.

Daniel Boone is popularly known as a deer-slayer and Indian fighter, but he was of a gentle and kindly disposition. While the Indians considered him to be their most skilful foe, they looked upon him as a man of honor, and treated him with a certain rough consideration, in all their dealings.

On one expedition Daniel Boone remained

in the wilderness for about two years, during which time he saw no human beings save hunting companions and hostile Indians. Several times during his life he was captured by the Indians and on one occasion was adopted by the Shawnee chief, Black Fish, the ceremony consisting of painting his body and plucking out all of his hair with the exception of a scalp lock.

In the 1790's Boone, losing his Kentucky holdings through defective titles and taxes, moved to Missouri, then a Spanish possession, where he was appointed commander of the Femme Osage district and given a grant of 8,000 acres. When Napoleon acquired the territory and sold it to the United States, Boone again found his titles worthless; but, the Kentucky Legislature aiding, Congress was persuaded to permit him to retain 850 acres.

He was born in the Dutch Colonial stone and timber house a few miles from the City of Reading, Pa. Daniel Boone kept his coffin under his bed and was placed in it on his death September 26th, 1820. He died in the stone house (left) at St. Charles, Missouri.



The Home, through its agents and brokers, is America's leading insurance protector of American Homes and the Homes of American Industry.

The HOME INSURANCE COMPANY

★ ★ ★ NEW YORK ★ ★ ★

FIRE . AUTOMOBILE AND MARINE INSURANCE

HI, FOLKS!

— Just to remind you that Long Distance telephone service is cheaper than ever, I've scattered through this magazine many rates for calls from many cities.

You will find a longer list of rates on the inside front cover of your telephone directory. See how little it costs to use this quick, personal service for pleasure or for business.



★ ★ ★

The special article The CASE for CONSTRUCTION

which appears in
this issue is now
available in
reprint form.

Cost of reprints ten cents each; \$6 per hundred; \$50 per thousand. Supply limited.

Write
NATION'S BUSINESS
Washington, D. C.

★ ★ ★

Travel Also Broadens Social Issues

(Continued from page 22)

other than those of the Dust Bowl, lost only about half of their natural increase leaving more persons seeking support from the land in 1940 than there were in 1930. This gain was registered in spite of shrinking demand for agricultural workers. Cities which had increased 25 per cent in the 1920's increased only slightly more than seven per cent. For the first time in many decades the rural population growth about kept pace with that of the city.

This slowing up of movement into industry was a natural result of the slump in industrial employment. The cities were not in position to absorb many new comers. The newer cities of the South and the West did continue to grow, not so rapidly as they had ten years before, but enough to absorb some migration. The larger centers of the East and Mid-

much more excitement. The millions who went from one job to another when industry was booming attracted little attention. The hundreds of thousands who hitch-hiked or bummed rides on freight trains more or less aimlessly and often in desperation aroused national concern.

Within agriculture, the situation was no more auspicious for the absorption of these excess workers than it was in industry. Export demand for agricultural products was sharply reduced and domestic purchasing power greatly curtailed. The resulting effort to balance production with demand by means of crop control had the effect of freezing the number of farm operators and reducing the number of hired farm laborers by 400,000 between 1930 and 1940. As a result, the young generation in farm families piled up at home in the 1930's in a state of underemployment or a



Large farm families, like this one in the cotton belt, generally result in surplus labor in the poorest areas

west actually lost by migration, mostly to their own suburbs.

In the states east of the Mississippi and north of the Ohio this suburban movement was the outstanding trend of the '30's. Along the Middle Atlantic Coast and around the Great Lakes both the farms and the cities lost by migration to the suburbs and spreading rural industrial areas.

Not only were the cities unable to absorb population as they did in the '20's but their bread lines and soup kitchens drove many to seek something better by way of the open road. This movement, though not so large in volume as the predepression shifts, was of such a radically different character that it caused

matured member of a farm family displaced a former hired laborer who went to the village to subsist on odd jobs or relief.

With this overcrowded condition in agriculture, it is apparent that the dream of solving the unemployment dilemma in the city by dumping the unemployed back on the land was futile. Even so, in the first years of the depression there was a considerable amount of voluntary return of urban unemployed to rural areas.

This was mostly a homeward movement by those who had previously come from the farm and returned to the old home after losing their jobs. Since they had previously come in large numbers

from poor land areas it was to these areas that the return movement was heaviest and for this reason the population pressure, already heavy on the poorer lands, was aggravated.

These currents and cross-currents of movement affected various areas differently.

The relatively prosperous farming areas of New England, the Middle Atlantic, and midwestern states continued to lose most of their natural increase by movement to nearby cities, so that their farm dwellers remained almost constant in number.

Farms in the Cotton Belt continued to lose much of their natural increase, mostly to nearby villages and to California and New Mexico from the western cotton area.

The areas of most serious population pressure were those of the Appalachian and Ozark Mountains, Rocky Mountains, Lake States Cut-Over, South Atlantic and Gulf Coasts, and French Louisiana where the supply of land was limited, where the supplementary mining and timber resources were depleted and where the natural increase of the population was rapid. There was an increase of almost 500,000 in the Appalachian farms and in villages where the resources were already taxed to support the 1930 population.

Relief affects migration

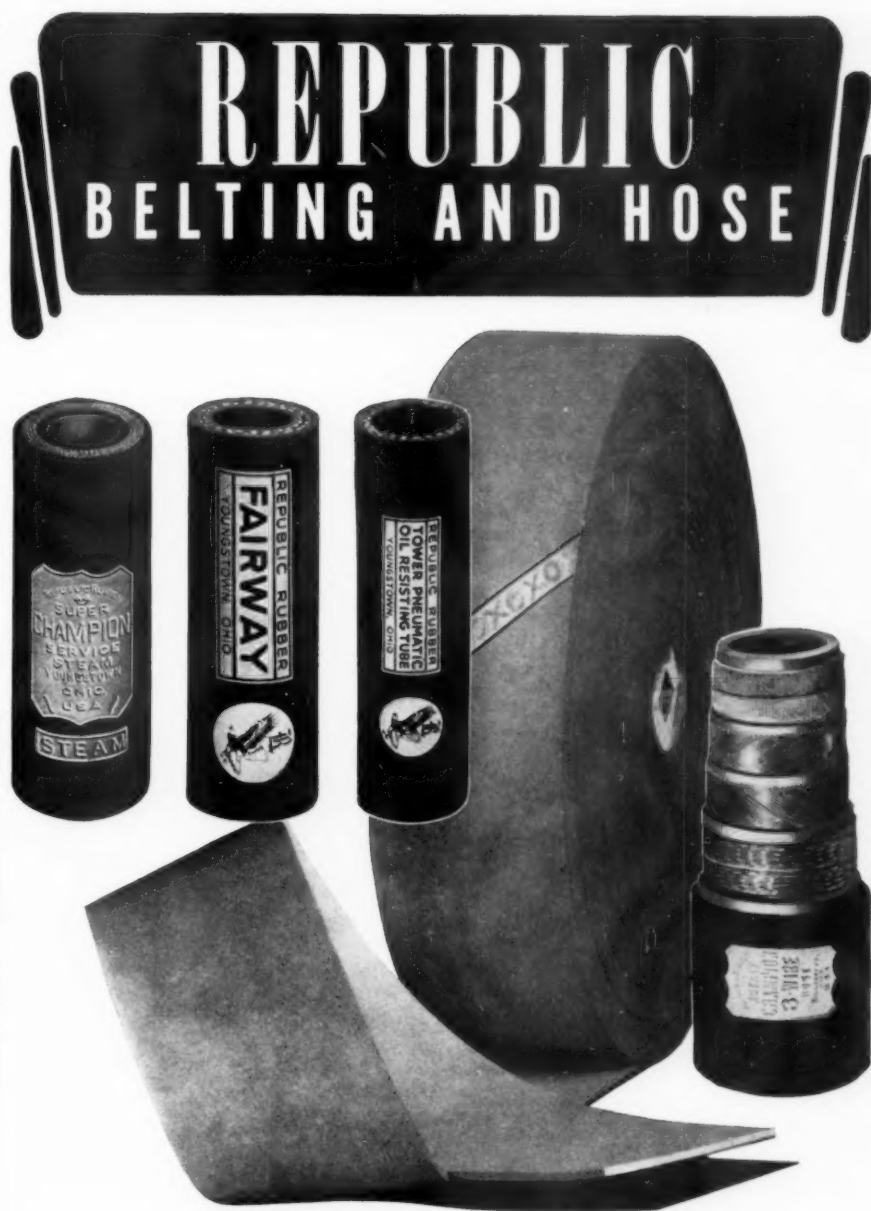
THESE disadvantaged areas are the very ones referred to as capable of doubling their population in 30 years if there were no outward movement. In addition, they were the areas to which there was the heaviest back-to-the-farm movement early in the depression. As the result of this return movement and the failure of the maturing youth to migrate, population has banked up alarmingly in these problem spots. They present the toughest rural relief problems of the nation.

There are also indications that certain depressed rural-industrial areas have felt the same kind of population pressure because of a rapid natural increase and failure to migrate. Southwest Pennsylvania, southern Illinois coal fields, Missouri zinc mines and the Southwest oil fields all suffered from severe unemployment and youth problems.

It would seem that the administration of relief has had a mixed effect on migration. Requirement of 12 months or more residence as a prerequisite for receiving relief undoubtedly "froze" some families to a place of residence when they might have benefited themselves by migrating.

Nevertheless, in the drought stricken Plains States, 1,250,000 were not prevented from seeking new homes. Over a period of time, relief families seem to have moved more often than those not on relief. Perhaps the meaning of this is that both relief and mobility are symptoms of the same thing—economic insecurity.

Much of the movement of the 1930's was the fruit of desperation or vain hope that opportunities would prove better elsewhere. The back-to-the-farm movement might have been termed a "back-



The Service demands placed on mechanical rubber products by modern industry have naturally increased with the current emphasis on speed and efficiency. Republic's positive capacity to serve the most exacting needs of the day is the achievement of forty-one years of specialization in the exclusive manufacture of mechanical rubber products. The entire organization, its plant and laboratory facilities, have a singleness of purpose. REPUBLIC RUBBER DIVISION OF LEE RUBBER AND TIRE CORPORATION, YOUNGSTOWN, OHIO.

ORDER
REPUBLIC
RUBBER
PRODUCTS
FROM YOUR
DISTRIBUTOR

REPUBLIC RUBBER

LEADERSHIP IN POLICY
PRODUCT AND PERFORMANCE

HOSE • BELTING • PACKING • MOLDED PRODUCTS

Prepare for the Speed-Up



with an
OXFORD
***PENDAFLEX**
DESK DATA
OUTFIT
in your deep
desk drawer

New and Unique -
Folders that **HANG!**



THE PENDAFLEX WAY—
folders can't sag, they hang!

All headings always on
same easy reading level.
Folder opened for with-
drawal of paper stays
open for its replacement.

Get instant loca-
tion and replace-
ment of important
data without dig-
ging—without an-
noyance. Make
quicker quotations,
faster decisions. Get
more done more
easily. A PENDA-
FLEX Outfit will
increase your per-
sonal efficiency a-
mazingly at little
cost. Write for de-
tails and name of
near by dealer now.

OXFORD FILING SUPPLY COMPANY
349 Morgan Avenue Brooklyn, N. Y.

*Reg. U. S. Patent Office

NEW YORK

to

Cleveland85c

Chicago.....\$1.25

St. Louis.....\$1.45

Houston.....\$2.00

(3-minute, station-to-station
rates after 7 every evening
and all day Sunday.)



to-the-poor-land" movement. Movement from the Dust Bowl was well advised but it is probable that it was insufficient in volume to adapt the population of that area to its depleted resources. Immigrants to California far exceeded job opportunities. Most of those who settled in the Pacific Northwest found jobs but even then there was some excess of labor.

The maldistribution of the population makes the problem of the defense commission tougher than it ought to be. We hear much of the necessity for training in connection with preparedness—the creation of a supply of mechanics and technicians necessary to carry on defense activities. In this respect the distribution of the population creates difficulties. The training facilities and the

excess population are not in the same places. Our technical high schools are in the cities and the excess population has been piling up in the poorer and more isolated rural districts. We have already indicated that this population pressure is mainly in the Rocky Mountains, the Appalachian and Ozark Mountains, the Mexican Border, the Atlantic and Gulf Coast Plains and in the Cotton South. These are places where vocational training is deficient. A primary defense job is to get the people and the training facilities together.

The distribution of population also complicates the problem of the proper location of defense plants. Since the increase in new workers is occurring largely in areas of least industrial development, consideration has to be given



Tenants Say He Is Best

Never Asks for Rent: Every year for the last 3, tenants of Harry Z. Suchin in Dobbs Ferry, N. Y., give him a dinner. Guests, who have been former tenants, from as far away as San Diego make every possible effort to get there. Each year they present him with an engraved gift inscribed "Best Landlord." Photo shows him receiving inscribed silver pitcher. They swear he is the best in the United States. Mr. Suchin says the secret for winning his tenants' affection is simple. He fears the words "unpopular landlord" so he gives his renters what they want. He put in flower gardens, tennis courts and a ballroom. He doesn't ask them to sign leases—says if they want to move, that's O.K. Has never raised rents. Never says "no" to a reasonable request. Never asks for the rent and has never lost a cent. He still has more than half of his original tenants. He is merely applying the Golden Rule to business, says Mr. Suchin.

to the means of location in connection with availability of labor. It is for this reason as well as for military considerations that the defense commission is scattering some of the new plants into areas not heretofore heavily industrialized.

Full employment of the working force incident to the defense program or to any other spurt of industrial activity, therefore, involves a wholesale retraining and redistribution of the labor force. The length of time during which excess population has been accumulating in remote regions has magnified the size of this task.

To build plants and to place orders is not enough to do the job. Social engineering is as important in reaching the goal as industrial engineering.

A glance at a map showing the areas which are producing the population of the future and those affording the industrial opportunity is sufficient to show that the shifting of population will and should continue.

The states with ample opportunity do not have a sufficiently large young population to expand the present labor force. The states with a predominantly agricultural economy have large excess youth populations.

Migration without plans

UNGUIDED migration has, in the past, proved at best a hit and miss method of adapting the population to resources. Sometimes whole families move off to seek jobs which may or may not materialize. One who has observed the wanderings of the migrant farm labor families of California, Florida, and other smaller seasonal crop areas is impressed with the excess of job seekers over full time jobs, except in unusual circumstances.

The cotton crop of Arizona in 1937 could, for instance, have been efficiently picked by two-thirds of the labor force which was enticed into the state. What usually happens in such circumstances is that those not needed are turned away or the work to be done is divided up among so many applicants that most of them earn very little.

Various efforts have been made to prevent that sort of thing. Some have succeeded better than others. On the whole, it seems probable that there must be better methods of handling the problems this migration creates than by setting up barriers at state lines.

On the other hand, Americans have been traditionally mobile. From the earliest days they have been free to travel and have exercised that right for social or economic reasons. They are not likely to change overnight. But, until they do, this wanderlust is going to add a difficult X-quality to the problems of those who attempt to map out social or reform programs to be administered from Washington.

Perhaps the best method of anchoring potential nomads is to develop local opportunity to the maximum and to aid industry to the end that it may absorb more workers. Those with economic security are less likely to travel than those without.

HOW TO SECURE YOUR OWN INVESTMENT DEFENSE PROGRAM

... with the help of the new BABSON'S PERSONAL INVESTMENT SERVICE

SUPPOSE, after a thorough check-up of your financial condition, you are found to be weak in some phase of your investment set-up.

Maybe the relation between your inflation and deflation securities is out of balance. Perhaps you need to switch or sell some holdings. You can take the action yourself. But, like any individual, you wonder whether your own course of action is correct. At this critical time, the average investor becomes bewildered. Uncertainty sets in . . . the wrong moves may be made.

The skilled, guiding hand is needed. Expert and authoritative advice — as continuous and interested as your physician's — can often prevent the financial relapse.

► But, go beyond supervision — have personal consultations — and your condition improves immensely. Now there is no need to worry, to be uncertain. You can talk over your problem — not just one, but any and every problem pertaining to your personal program. Often relief is immediate. You are receiving the fullest extent of professional attention . . . as often and as long as the need or want exists. And the doctor is interested only in getting you well and keeping you well. He has no "axe to grind." He simply gets a

fee for the advice and help he gives based on his specialized knowledge and his skilled experience.

Finally, for your peace of mind and general improvement, you receive weekly "visits" in the form of confidential letters . . . much as your doctor might send to keep you posted on newer and better ways to maintain a continuously strong condition.

► Isn't it obvious that the same kind of care and attention you need for your physical improvement, you also need for your financial improvement?

And you can get all of that, now . . .

You can secure this investment help and advice in preparing and planning your own investment defense program, through the authoritative new BABSON'S PERSONAL INVESTMENT SERVICE, now made available by the famous BABSON ORGANIZATION — the oldest and foremost investment advisory service of its kind, with a background of 36 years of experience and unchanged ownership through five booms, five panics, nine administrations and two World Wars.

You are invited today to inquire for the complete information about this new BABSON'S PERSONAL INVESTMENT SERVICE.



Your estate is surveyed, the assets you have are examined, rated and balanced against your liabilities while taking into consideration your age, health, dependents, insurance, income, cash, real estate, expenses, obligations and objectives.



Your whole investment program is under continuous supervision. As the need or want arises, you are given immediate and specific hold, switch or sell advices. You are always informed when and how to make changes in your portfolio.



You receive confidential weekly news letters with security and market analyses plus expert interpretations of the national and international political, financial and business developments as they affect your estate and your peace of mind.

► This personal service is yours for the one yearly fee — the same fee for one and all — of only \$120, including supervision of securities in 25 companies (and \$2 for each additional company).



Based on the survey findings, a plan is created to fit you, and proportioned for income, for protection, and for appreciation. Your program is diversified, you are hedged against eventualities. You know the cash to hold and the investments to make.



You may consult with BABSON'S as many times as you wish in person, by phone, wire or mail, on any and every problem concerning your investment portfolio, holdings, resources or personal budget. There are no restrictions.

ARE YOU IN DOUBT?

Worried about some of your holdings? Are you wondering whether to sell? . . . switch? . . . hold? Is the future of some of your stocks in doubt? Would you like to have the answers? Then learn how BABSON followers are being advised on the same securities you hold.

WITHOUT OBLIGATION

— just send us your list of no more than seven securities and you will be told which ones BABSON clients are being advised to eliminate. Just pin your list to this "no string" offer. Do it now for a prompt and timely reply.

BABSON'S REPORTS

Incorporated

Babson Park, Mass. Advisors Since 1904

BABSON'S Personal INVESTMENT SERVICE

CHICAGO

to

Des Moines.....70c**Memphis.....90c****New Haven...\$1.35****San Francisco.\$2.50***(3-minute, station-to-station
rates after 7 every evening
and all day Sunday.)***PACIFIC GAS AND ELECTRIC CO.****DIVIDEND NOTICE****Common Stock Dividend No. 101**

A cash dividend declared by the Board of Directors on March 12, 1941 for the quarter ending March 31, 1941, equal to 2% of its par value, will be paid upon the Common Capital Stock of this Company by check on April 15, 1941, to shareholders of record at the close of business on March 31, 1941. The Transfer Books will not be closed.

D. H. FOOTE, Secretary-Treasurer.

San Francisco, California.

**You can get a
BINDER
for your copies of
NATION'S BUSINESS
for only \$1.15**

AN inexpensive way to bind your copies of NATION'S BUSINESS. This binder is strong, practical and simple to use. No punching or marring of the magazine is necessary. A click and the copy is in. Any issue can be removed without disturbing the other copies. Holds twelve issues. Send your order today to NATION'S BUSINESS, Washington, D. C.

MEMO*for Busy Readers*

1. A hotel goes antiseptic
2. Embryo aviators study slides
3. Stepping-up civilian output
4. Taxes eat more profits

**Hotel Stresses
Guests' Health**

CONCERN FOR health of hotel guests advances to new refinements in practices recently established by Hotel Empire, New York. Schedule of sanitary treatments now in effect includes every item of personal use which body is likely to touch in ordinary occupancy of private rooms.

Bathrooms are antiseptically treated by cleansing toilet, wash basin, bathtub, floor, all faucet handles, flushometer handle and glassware. Toilet seat and glassware are fitted with cellophane wrappers. Ice water pitcher and glassware in rooms also have cellophane wrappers. All linens on beds and in bathrooms are treated with an active antiseptic. Spare blanket is enclosed in a specially sealed bag. To use blanket, seal must be broken.

Guests can have their own personal linens "sanitized" by sending them to the hotel's laundry at no extra cost. Valet service includes vacuuming every suit, overcoat or other garment before pressing. When a tuxedo or full dress suit is sent to be pressed, it is returned with a white carnation pinned to the lapel. A pad of matches is placed in the match pocket of all suits. "Sanitizing service" will be carried out throughout the premises. Restaurant china, silverware, glassware, linens, etc., are similarly treated. Barber shop and beauty parlor use instruments, equipment and linens that have been treated antiseptically.

All employees are subjected to thorough pre-employment medical examination, are re-examined at regular intervals of not more than six months, depending on nature of work.

Maids, bellboys, cooks, waiters, waitresses and bartenders whose work puts them in contact with things guests and patrons handle daily are examined more frequently than carpenters, painters, and electricians. All medical examinations are at hotel's expense.

**Film Course
for Flyers**

COMMERCIAL picture industry has perfected new method for pilot training expected to quicken students' assimilation of ground school instruction. Course re-

lies on visual method long successfully applied by business in training salesmen and mechanics. Course is based on official ground school material of Civilian Pilot Training Program, is checked and approved by Civilian Pilot Training Service, Civil Aeronautics Administration.

Twenty-four educational slidefilms, composed of hundreds of photographs, diagrams, and drawings, make up instruction material produced by the Jam Handy Organization, Detroit commercial picture firm. Still pictures arranged in sequence on strips of standard motion picture film make up the slides for projection. They are accompanied by explanatory text. Subject matter of films includes civil air regulations, navigation, meteorology, aircraft engines, instruments, and parachutes.

Film instruction is in effect at Wayne University, Highland Park Junior College, Marietta College, Vanderbilt University, University of Miami, and University of Detroit. Several non-college ground school operators under the Civilian Pilot Training Program are also using the new visual method.

Prescription for Man-Hour Loss

AS ENLARGING fulfillment of defense schedules cuts into normal production, ways must be found to enable the nation to sustain satisfaction of normal wants. Plant modernization is a reasoned prescription. Pertinent considerations include relief of current pressure on the labor market, cost reduction, lifting output per man-hour and man-year to higher levels by plant rehabilitation.

Relevant comment and conclusions appear in a booklet "Meeting the Demand for Faster Production," published by the Farrel-Birmingham Company, Ansonia, Conn., maker of many types of machines. To quote:

Wartime production needs of even 12,000,000,000 man-hours yearly, superimposed upon domestic requirements ranging in peacetime at 15,000,000,000 man-hours, represent a total of 27,000,000,000 man-hours. The increased hours of effort represent continuous production of some 5,000,000 additional men, even counting a man-year as 2,400 hours.

It is important to see the situation in that light; it is also useful to observe that

probably not more than one-half such a number could be absorbed in manufacturing, considering both the limitations of factory floor space and the relative absence of a large supply of skilled and experienced labor. Approximate as such estimates must be, they nonetheless bring the problem into focus.

The gradual decline in man-hours per unit of output between 1899 and 1919 and the sharp reduction between 1919 and 1931 came to an end in 1933. Since 1933 data from that source show that no further gains have been made on the whole in reducing the labor time per unit of output. Instead, the former trend has shown signs of reversing itself.

Coincident with, if not the most important cause of that trend, is the sharp advance in the average age of production machinery. From six to eight machines out of each ten in important defense industries are more than ten years of age and do not have the improvements developed in the last decade.

That condition, if corrected, might provide an increased productivity per man-hour equivalent to adding not less than 1,000,000,000 and perhaps as much as 3,000,000,000 man-hours of effort to factory processes.

Taxes Eclipsing Dividend Yield

SKYROCKET flight of taxes is pointedly traced in annual report of the E. I. du Pont de Nemours & Company. Taxes payable by the company, represented as per cents of earnings available for dividends, amounted to 8.8 per cent in 1925, passed ten per cent in 1932, climbed to 20 per cent in 1937, soared to 65.2 per cent in 1940.

Last year, company's total bill for direct taxes was approximately \$56,700,000 at rate of more than \$1,000,000 a week. Only operating cost items of greater magnitude were wages and salaries, about \$94,800,000, and raw materials, about \$88,000,000.

Of total direct taxes of \$56,700,000, about \$50,200,000 were payable to the federal Government. Figure compares with \$16,000,000 for 1939, an increase of more than 200 per cent. Federal tax on 1940 earnings was more than double amount it would have been if the 1939 tax law had remained in effect.

Newsmen Band for Good Will

ABUNDANCE OF Latin-American correspondents covering Hollywood's movie industry stirred Los Angeles civic and business leaders to consideration of journalistic colony as productive nucleus of international good will promotion. Upshot, Los Angeles Chamber's publicity department organized the Pan American Press Club.

Objectives are:

1. To disseminate more information and good will about the United States throughout Latin America, and vice versa.
2. To encourage exchange of students and journalists between the Americas.
3. To stimulate travel between the Americas.
4. To make all the Americas all-American.

Several members represent more than one paper or syndicate; one serves nine newspapers. Every country and major city of Latin America has an active cor-

respondent. The group meets in Los Angeles factories and cultural institutions, which provide photographs and story material for the correspondents' use. Invariably, Los Angeles and the United States are favorably publicized in Latin-American countries.

Visits have included plants of the Lockheed Aircraft Corporation and the western branch of Chrysler Motors. In immediate view are tours of a California winery, the Huntington Library, Los Angeles Harbor, an oil refinery and a tire factory.

In Los Angeles members of the group have addressed service clubs and other organizations. Recently the club established a Western States network broadcast with short wave to South America.

Fewer Tax Free Institutions

LEGISLATIVE action in Maine and Maryland, court decisions in New Hampshire and North Carolina, and rejection of constitutional amendment in Louisiana—all within past two years—indicate a trend toward tightening tax exemptions for property of religious, educational and charitable institutions.

Maine and Maryland, where real and personal property used and owned by charitable and educational institutions have been exempt from taxes, require now that such property must not be administered for private gain if it is to be tax free.

The New Hampshire supreme court upheld a statute nullifying charter pro-

When you buy Fluorescent . . . MAKE THE MOST OF IT!



A modern office lighted with
Certified Fleur-O-Liers



...with Certified FLEUR-O-LIERS

LIGHTING FIXTURES FOR INDUSTRY AND COMMERCE

Here's one easy way to make sure of top performance when you use new fluorescent lighting for your store, office or factory. Insist on fixtures showing the famous FLEUR-O-LIER Certification Label. It certifies that FLEUR-O-LIERS have met with 50 exacting specifications for electrical, mechanical and lighting excellence—as set up by MAZDA lamp manufacturers. Auxiliary control equipment is certified, too, for balanced, reliable operation. Over 75 different designs now available. Ask your electric service company, electrical distributor or contractor—or use coupon below for new booklet and list of manufacturers.

Over 40 leading manufacturers participate in the FLEUR-O-LIER program which is open to any manufacturer who complies with FLEUR-O-LIER requirements.

FREE! Be sure to read this new booklet before you buy fluorescent lighting. Get the facts about FLEUR-O-LIERS.



FLEUR-O-LIER Manufacturers

2116-4 KEITH BUILDING • CLEVELAND, OHIO

Please send me FREE the new booklet "The Certified Fleur-O-Lier" giving helpful information for stores ☐ offices ☐ and factories ☐.

NAME

ADDRESS

CITY

STATE

**SERVING INDUSTRY
FOR OVER 60 YEARS**
WITH *dependable*



**CHICAGO
WATCHCLOCK
SERVICE**


For more than 60 years the Chicago Watchclock Corporation has devoted its entire effort to perfecting Watchman's Clock Systems. Today, the Chicago Watchclock is the most perfect device for safeguarding your plant and checking the nightly rounds of your watchman. We point with pride to the many installations of our service. Over 60,000 users! This service can tick off valuable minutes of safety to you. Write

CHICAGO
WATCHCLOCK CORPORATION
1528 SO. WABASH AVE., CHICAGO, ILLINOIS
CALUMET 4909
111 JOHN STREET, NEW YORK CITY

D E N V E R
to

Omaha 95c
Birmingham . . \$1.65
Detroit \$1.75
New York . . . \$2.25

(3-minute, station-to-station
rates after 7 every evening
and all day Sunday.)



Advertisement



Arnold Genthe

INTERNATIONAL BUSINESS MACHINES CORPORATION

visions which granted institutions perpetual exemption from taxation, holding that legislatures may not permanently waive right to tax. Many colleges possess such old charters, National Association of Assessing Officers explains, citing Chrysler Building in New York, owned by the Cooper Union, as example of property which thereby escapes taxes.

North Carolina supreme court ruled that property owned by an institution must be used for institutional purposes to be exempt from taxes. As a result, two North Carolina counties alone placed on their tax books a total of more than \$2,000,000 worth of religious, educational and charitable property which had been rented to private interests.

Louisiana citizens on November 5 rejected proposed constitutional amendment exempting from taxes fraternal order buildings devoted to charitable purposes.

Every state grants some type of institutional exemption and sets up one or more requirements, or tests, which the property must meet to be exempt. Tests employed in various states to determine taxable status of institutional property include those of use, ownership, profit, private gain and occupancy. Most common is the use test, which grants immunity from taxes if property is used for charitable, religious or educational purposes.

Statutes say little on administration of exemptions. Twenty states require assessors to list exempt property on assessment roll; six require formal application for exemption each year and three states at less frequent intervals. A few states place a large share of responsibility on their tax departments.

Amount of tax exempt, privately owned property in the states is estimated at \$7,600,000,000, major part of which is institutional property.

"Gyp" Schools Bilk Students "RACKET" TRADE schools to cash in on eagerness of young men to train quickly for defense jobs are sprouting all over the country. Some are operated by racketeers with previous records of fraud. Nearly all of the "gyp" types of schools are financed on a shoe-string and cannot afford either adequate equipment or good instructors.

Like most rackets, the "gyp" job-training school is flourishing on popular enthusiasm for something legitimate, is "muscling in" among the many legitimate schools for trade and vocational training. So concludes the Northwestern National Life Insurance Company after a survey by its Family Economics Bureau.

Job of separating good schools from bad is complicated for ambitious youngsters by the fact that some new trade schools are entirely legitimate, having been established by reason of fact that many older schools are already crowded to capacity with long waiting lists. High pressure salesmen for "gyp" schools have filched the savings and obtained the contract signatures of thousands of ambitious young job seekers by "guaranteeing" jobs with big airplane plants and other defense production industries, and

by representing that their schools have "deals" with such companies to supply them with trained employees.

Situation has become so bad that major aircraft companies have been flooded with inquiries and complaints regarding "guaranteed placements" promised by school salesmen. Several California companies have issued warning bulletins to effect that they had authorized no such agreements, understandings, or guarantees.

Chambers of commerce in various defense industry centers are issuing warnings. Inquiries about trade schools have become largest classification of queries received by Better Business Bureaus of some cities. Minneapolis Better Business Bureau has been forced by number of inquiries to stop responses on individual schools, but offers general advice to prospective student so that he can check legitimacy of the school.

The two principal faults of the "racket" trade school, the report emphasizes, are overselling the opportunity and undertraining. In the downright "gyp" type of school, students usually do not finish so-called training courses and are not encouraged to do so.

In respect to borderline schools, some trainees are actually being placed in employment where industries are desperate for help and prefer a man with even rudimentary job training to an absolutely green hand.

Simple tests which any youth can apply to the school he is considering, before he pays any money down or signs an application blank, are suggested in the report. For example:

He should demand a list of recent graduates of the school. He should get in touch with several such graduates, either by personal contact or by letter, and ask them the following three simple questions: Was the course satisfactory? Did it help you to get a job? Has it helped you win advancement in your job or, if you have been employed only a short time, do you feel that it is likely to help you win advancement?

If the prospective course is one which is aimed to prepare the trainee for a government examination, he should obtain a list of graduates who have successfully passed the required government examination, and talk to them. In respect to a newly established school, the prospective student should ask some older friend to investigate financial responsibility of sponsors, completeness of the equipment, and previous connections of the instructors. Finally, the report warns that the job opportunities and the shortage of labor are badly misrepresented in some cases.

While there may be great scarcity of expert and first grade mechanics in specific lines, there may be no opportunity for the green hand just out of school, particularly if his school training has been mediocre.

States Reject Many New Ideas

APPROVAL of two state civil service amendments, varied decisions of voters on old age security proposals, and rejection of liquor questions and proposals to raise legislators' pay featured results of No-

vember 5 balloting on approximately 165 constitutional amendments and initiative or referred measures.

Approximately two-thirds of the proposals were defeated in the election, including the majority of amendments and measures relating to taxes and gasoline and motor fuel funds.

Civil service amendments were approved in Michigan and Louisiana. The Michigan amendment authorizes a bipartisan four-man state civil service commission with all state employees under the merit system except elective officials, department heads, and some others. Approval of the Louisiana amendment provides for state civil service by confirming the act passed by the 1940 legislature.

Old age security measures were ap-

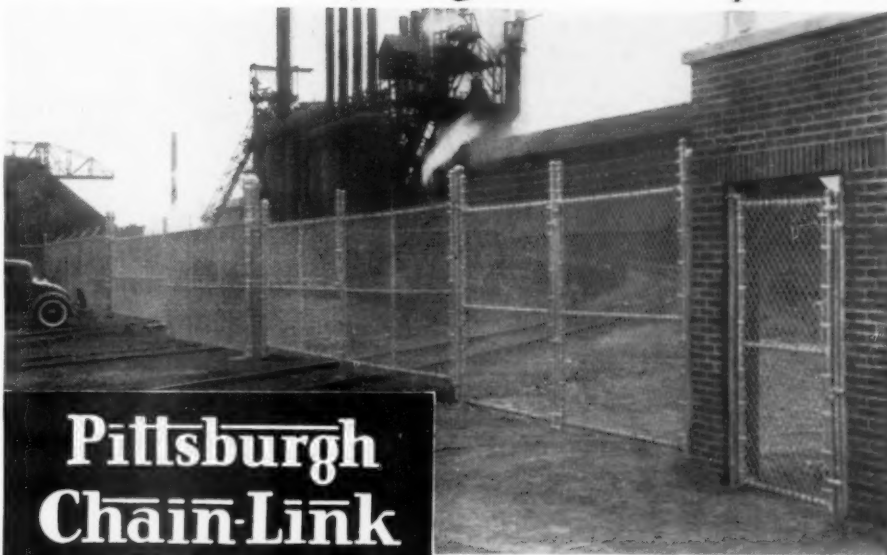
proved in Washington and California, rejected in Colorado and Arkansas.

Washington amendment raises pensions from \$30 to \$40 a month for persons over 65, abolishes liens on property of recipients. Colorado voters rejected an amendment to reduce state's present \$45 a month limit to \$30. Arkansas refused approval of amendment setting up a new old age assistance system, and reducing the eligible age from 65 to 60.

Amendments to raise legislators' pay were rejected in Louisiana, Oregon, Missouri and Washington.

California defeated a proposal to permit annual sessions of legislature. Tennessee gave a three-to-one majority to amendment lengthening governor's term of office from two to four years.

GUARDING THE VITAL *Gateways of Industry!*



Pittsburgh Chain-Link Fence

A combination of Pittsburgh Chain Link Fence and gates controls the flow of rail, automotive and pedestrian traffic in this typical steel plant installation.

Pittsburgh Chain Link Fence installations are favored by industrial users because of a combination of desirable quality features not fully available in any other line of industrial fences. In addition to "equal or better" specification fence fabric, protective barb wire arms, for example, are adjustable to any of three positions! All post caps fit deeply and snugly over the outside of the posts, excluding moisture. Tension bands have smooth, beveled

edges; fastener nuts are inside the fence and not accessible from the outside. Gates swing full 180° on sturdy, easy-operating hinges, and special gate designs serve special conditions. Pittsburgh Chain Link and the economical Pittsburgh Special Industrial Fence afford property protection to suit every buyer. For complete erection service refer to your city classified telephone directory or write to Pittsburgh Steel Company.

Pittsburgh — A Great Name in Steel

Trade Name for Pittsburgh Steel Company Products

Pittsburgh Steel Co. is a completely integrated steel company with ingot capacity exceeding 1,070,000 net tons. Products include: Steel Ingots—Blooms—Billets—Tube Rounds—Shell Steel—Shell Forgings—Wire Rods—Carbon and Stainless Steel Wire—many Finished Wire Products—wide range of Carbon, Alloy and Stainless Seamless Steel Tubes. Inquiries invited.

PITTSBURGH STEEL COMPANY

1635 GRANT BUILDING

PITTSBURGH, PENNA.

A "Time Clock" for Machinery!

Heavy Marks Show Busy Time of Machinery



What Does It Cost You when Machinery is IDLE

for half an hour when it might have been producing? Suppose you could increase its running time merely 10 minutes a day. What would it mean? More than you'll ever save by "little economies."

The big economy in any plant is to increase productive time, if only five per cent.

You don't have to hold a stop-watch to do it. Clamp a **Servis Recorder** right to any machine and leave it there. Leave it all day. The next morning ask for the chart. No mistakes here. Your machinery has automatically written its own story for 24 hours. You can read it at a glance—busy time—idle time.

THE SERVIS RECORDER

"Thousands in use"

Then? Then you *know* just what to do about those stops and delays. Ask for full information—use coupon below.

THE SERVICE RECORDER CO.

Cleveland, Ohio

Write for it TODAY!

THE SERVICE RECORDER CO., NB2
 1375 Euclid Ave., Cleveland, Ohio
 Please send us, without obligation "A BUSY PLANT—But how busy?"

Company.....
 Attention of.....
 Street.....
 City & State.....

Socialism in a Potato Sack

(Continued from page 16)

well as make payments to the Federal Deposit Insurance Corporation and carry fire, theft, storm and other insurance.

Naturally, its highest rate of interest is set by the State of Mississippi, and obviously, it is regulated by the federal Government through various agencies. It can lend money to whomever it wishes, if the prospective borrower has adequate collateral.

Not more than two blocks away is the Farm Security Administration office of the United States Department of Agriculture. This agency also lends money to worthy, needy farmers. Its top rate of interest is five per cent, three per cent less than the maximum rate the state banking office sets for banks. It, too, technically can lend money only to farmers who can put up collateral, or can pass examination by a non-partisan board. (Actually, almost any healthy, needy farmer can obtain a loan to buy land with the land serving as collateral for the loan.)

Tax free socialistic projects

IN THE several years of its operation in this county, the F. S. A. has made loans to thousands of farmers, in many cases taking over notes of farmers who were tired of paying to banks, giving the borrowers a lower rate of interest and allowing them to pay at will on the principal. For Mississippi as a whole, at least 10,000 farmers are served through the banking facilities of the Farm Security Administration each year.

It is not my purpose to call this "good" or "bad." I would like to point out, however, that, where the bank must pay taxes to stay in business, the F. S. A. office in each county pays not one dime into the city, county, state, or federal till. It is operated in open competition with the banks of the counties where it has offices. No one ever thinks to call it a "socialistic" experiment, but I wonder what, exactly, it is if this is not its correct designation?

Other businesses constructed with government money and operated tax-free under one form of government supervision or another in this congressional district include:

1. Cotton gins, built on borrowed government money and operated as cooperatives, after being planned, promoted and constructed under supervision of U. S. Department of Agriculture county farm agents, or representatives.
2. Cold storage locker plants, built in the same fashion, operated on the same principles and promoted in the same manner as the "co-op" cotton gins.
3. Cooperative fertilizer factories.
4. W.P.A. sewing room projects, U. S. Department of Agriculture mattress-making projects, and N.Y.A. furniture-building projects.

All of these projects sponsor the finishing of raw materials by paid govern-

AMERICA'S MOST AMAZING PUMP

PEERLESS HI-LIFT

R. Moineau U.S. Pat. Nos. 1892217 and 2028407



FOR DEEP WELLS
 DIFFERENT PRINCIPLE
 HELICAL CHROME ROTOR
 RESILIENT HELICAL STATOR
 WATER LUBRICATED
 500 to 3500 GALS. per hour

Utilizing a single water lifting member, consisting of a helical chrome rotor revolving at half usual shaft speed within a resilient cutless stator bearing, the amazing Peerless Hi-Lift Pump simplifies water pumping. Hypocycloidal action literally squeezes water upward.

No slippage; no priming; no pre-lubrication. Very economical in operation. Hi-Lift is easy to install, easy to service, easy to keep running. Proved in service as ideal for all industrial, commercial and agricultural applications, in deep wells 4" or larger. Capacities 500 to 3500 gallons per hour.

PEERLESS TURBINE AND HYDRO-FOIL PUMPS
 Capacities up to 100,000 g.p.m.

PEERLESS PUMP DIVISION

Food Machinery Corporation

World's Largest Manufacturers of Deep Well Pumps

MAIL COUPON FOR LITERATURE

PEERLESS PUMP DIVISION—Food Machinery Corp.
 309 W. Ave. 26, Los Angeles, Calif.
 WITHOUT OBLIGATION MAIL BULLETIN RE: HI-LIFT PUMPS

NAME.....

ADDRESS.....

CITY.....

STATE.....



THE SECRET OF HEALTHY HAIR

Hair getting thin? Bothered by dandruff? Don't waste time moping or doting your hair. Wake up your scalp and see the difference, feel the results. Let Vitabrush, the new electric driven scalp brush, answer your hair worries in a sensible, positive way. 5000 stimulating, vitalizing strokes per minute. Use Vitabrush only 3 minutes a day. Restful. Pleasant. Satisfying. Recommended by scalp authorities. Available in several models. Satisfaction guaranteed. Write now for full information including details of special money-back trial offer.

HERSHEY MFG. CO., 169 S. LaSalle, Chicago

HOTEL LENNOX ST. LOUIS MEMO

Tell the Boss to stay at the Hotel Lennox in Saint Louis. Perfect service—grand food—down town—nearby parking—private bath—radio reception

ment workers. The finished goods are given free to supposedly needy certified relief recipients.

It must not be assumed that these socialistic projects are confined to any one county or area. W.P.A. sewing rooms throughout the nation last year made thousands of garments which were distributed in direct competition with clothing retailers, who must pay the piper who helps run them out of business. Likewise, cooperative cotton gins, cooperative fertilizer factories, cooperative cold storage plants and similar industries are constructed regularly with government money to be operated tax-free under government supervision to help drive some privately owned company out of business.

The outstanding example of pure socialism in the Deep South today—as in virtually every part of the nation—is the system of dispensing surplus commodities to supposedly needy men and women.

Dispensing free food

THE Surplus Commodities Corporation, a subsidiary of the United States Department of Agriculture, came into the South on the heels of an idea begun under Secretary of Agriculture Henry A. Wallace, who stopped destroying food and began to give it away in competition with the grocery stores. Of course, since this food was distributed free, its customers have become legion. Today far more people in many Mississippi counties get their groceries from the commodity warehouse—free—than from grocery stores.

Until two years ago, the Works Progress Administration, the Mississippi Department of Public Welfare, the National Youth Administration, the Civilian Conservation Corps and the various other government agencies in effect were serving needy citizens of Mississippi without the use of socialized food. After the U.S.D.A. put the idea of dispensing surplus food into effect, boxcar loads of surplus commodities, ranging from cold-storage eggs to dried prunes, were shipped to loading platforms, emptied and distributed by government workers to all certified comers.

Let's examine what this practice has accomplished in Alcorn County, Miss.:

A few months after this plan began operating, approximately 1,000 families were receiving the surplus goods. These 1,000 families represented approximately 4,000 persons.

Today 4,075 families are certified as eligible for surplus commodities. These cases represent a total of more than 16,000 persons in a county with 26,000 population. They are eating food dispensed by government workers in open competition—if it can be called such—with legitimate grocery outlets. Recipients of surplus commodities are by no means the only ones receiving government aid in this county because the "regular" forms of relief—W.P.A., C.C.C., N.Y.A., F.S.A. and a diversity of others—continue to be paid regularly.

Of course the recipients of this socialistic food don't get a balanced ration. One week, two carloads of Idaho pota-

Permanent Protection with a low price tag

MODIFIED WHOLE LIFE 3 POLICY

ANNUAL PREMIUM, \$5000 LIFE INSURANCE

Age at Issue	First 3 years (Guaranteed)	4th and later years (before deducting dividend)	4th Year Net Payment (1941 dividend scale, used solely for illustration; see below)
20	\$69.20	\$81.40	\$66.40
25	79.10	93.05	76.60
30	91.75	107.95	89.55
35	108.55	127.70	106.40
40	130.90	154.00	128.50
45	160.60	188.95	157.40
50	199.85	235.10	194.95

Dividend at end of 3rd year may be used to reduce 4th year premium. Last column shows net payment on this basis, under our 1941 dividend scale. This figure is not guaranteed for the future but is given to illustrate the principle which applies. Dividends from year to year will depend entirely on future experience.

ISSUED AT AGES 10 TO 66, INCLUSIVE

A POLICY WITH MANY USES

Contains all the standard provisions

—cash values if you live



Get Booklet from
Local Agent or
Office or Home
Office

The Prudential
Insurance Company of America
Home Office, NEWARK, N. J.

Month after month,
and year after year,
Nation's Business
continues to be the
magazine most
wanted by
business men.

★ More subscriptions are bought
more expirations are renewed,
more copies are read, than of
any other business magazine.

ST. LOUIS
to
Akron 90c
Pittsburgh... \$1.05
Houston..... \$1.15
Boston \$1.60

(3-minute, station-to-station
rates after 7 every evening
and all day Sunday.)



To
**NEW ZEALAND
AUSTRALIA**

New Liner

AWATEA

*Flagship of a famous fleet of
55 ships, with the popular*

AORANGI

Monthly service from Vancouver to
Honolulu, Suva, Auckland, Sydney.

Connections at Honolulu from
California ports. *Your own agent* or
Canadian Pacific: 41 offices in the
United States and Canada.

*Canadian
Australasian*

TRAFFIC AGENTS—CANADIAN PACIFIC



TELEPHONE SERVICE
also reaches around the
world. Here are typical
overseas telephone rates:

NEW YORK to

	Week-day	Sunday
Nassau	\$7.50	\$5.25
Panama	11.25	7.50
Honolulu	13.50	11.25
Rio de Janeiro	15.00	12.00
Buenos Aires..	15.00	12.00
Tokyo	19.50	15.75
Sydney	19.50	15.75

(All rates for 3 minutes.)



toes will be passed out to the shoving masses at the "commodities depot." Another week, a carload of prunes and another of eggs will be dispensed. Again a carload of lettuce and another of celery will be emptied.

Grocers must keep tab on the food shipped in because, in a hurry to unload the freight cars to prevent demurrage, distributors frequently give several bushels of whatever commodities are at hand to all certified callers.

These relievers sometimes try to sell some of their allotment to unwary grocers. They use the remainder as quickly as possible.

There's no need of being thrifty with this food.

What happens to the grocers? They continue to operate but the entire credit

structure of their business is being undermined.

The farmers of a county where these "surplus" foods are dumped are hurt most, although technically the "plan" is to help them. When two carloads of free eggs are shipped into Alcorn County, it is not difficult to see where the poultryman is injured financially. And when two boxcar-loads of Idaho potatoes are shipped into the county, the market for home grown potatoes is bound to suffer.

Perhaps the most uneconomical factor in this "surplus" commodities distribution, however, is the utter lack of regard for transportation expense. Eggs from Minnesota are shipped hundreds of miles when there is a surplus of eggs already in the territory where they are to be dispensed. Potatoes are shipped in from



A Food Queen

Miss Grace E. Smith went to Toledo, Ohio, many years ago as secretary of the Y. W. C. A. Her first problem was to rescue the Y. W. cafeteria from financial difficulties. Her success in this venture encouraged her to branch out into the restaurant business. After 25 years in the business, she is today one of Toledo's recognized business leaders and president of the National Restaurant Association, highest official position that can be attained in her business. Appreciative Toledo citizens recently paid her tribute with a testimonial dinner where they might make public acknowledgment of her civic and business accomplishments.



thousands of miles away while home grown potatoes are rotting in the field for lack of buyers.

The commodity warehouse pays no taxes, of course. But the 275 retail grocers of Alcorn County must pay city (if in a municipality), county and state taxes. There was a time when they contributed to federal coffers, too, but I daresay few of them had to pay a federal income tax in 1941.

Hurts business—and taxes

THE Government, in the case, in effect has killed the goose that laid the golden egg. The Food Stamp Plan undoubtedly relieves local situations such as this, at least temporarily, but it, too, causes many useless expenditures of tax money.

While these policies are being put into effect without apparently revolutionizing the viewpoint of farmers and laborers, business men are finding that socialism, whether called "government spending" or just "bad management" is as effectual in throttling them as it would be under its correct name. The effect is to make capital take cover and enterprising men lose heart.

The effect of these government policies on the rank and file of Southerners could be termed "good" from the standpoint of a politician who wanted to subjugate them. Where once even the poorest "hill-billy" would have fought for his right to live without "charity," today even the most stalwart farmers are openly getting their foodstuffs along with chronic relievers.

I stood with a small business man not long ago and watched government workers dispense commodities. As we watched, he said, half-cynically, half sadly:

"There are men down there carting away food whom I will bet would have fought me five years ago if I had predicted it. I would have bet my life on their economic integrity, but today . . . well, they have changed their ideals."

He and dozens of other business men have told me of farmers, once determined to "come out of it the hard way" and to maintain their self-respect, who now stand in line with men whom they used to hold in contempt for thriftlessness and laziness. They take their daily bread from the same socialistic store!

As is only natural with them, some local politicians are making hay while the socialistic sun shines. A study of their actions while socialism is *only half-way* in power gives us a view of what to expect when and if it triumphs entirely. By wielding influence over the local administrators of the state department of public welfare (whose rent is paid by the county and whose salaries are paid by the state), many local politicians are succeeding in getting every voting friend on "commodities only" relief.

Next election day these relievers will owe them allegiance. These politicians hardly think that, by doing this, they are running the county down financially and forcing the citizens into poverty of body and mind. Resourcefulness must be killed before the New Order can come in—thousands of persons must be in servitude to an all-powerful ruling clique. We

are moving rapidly toward that condition.

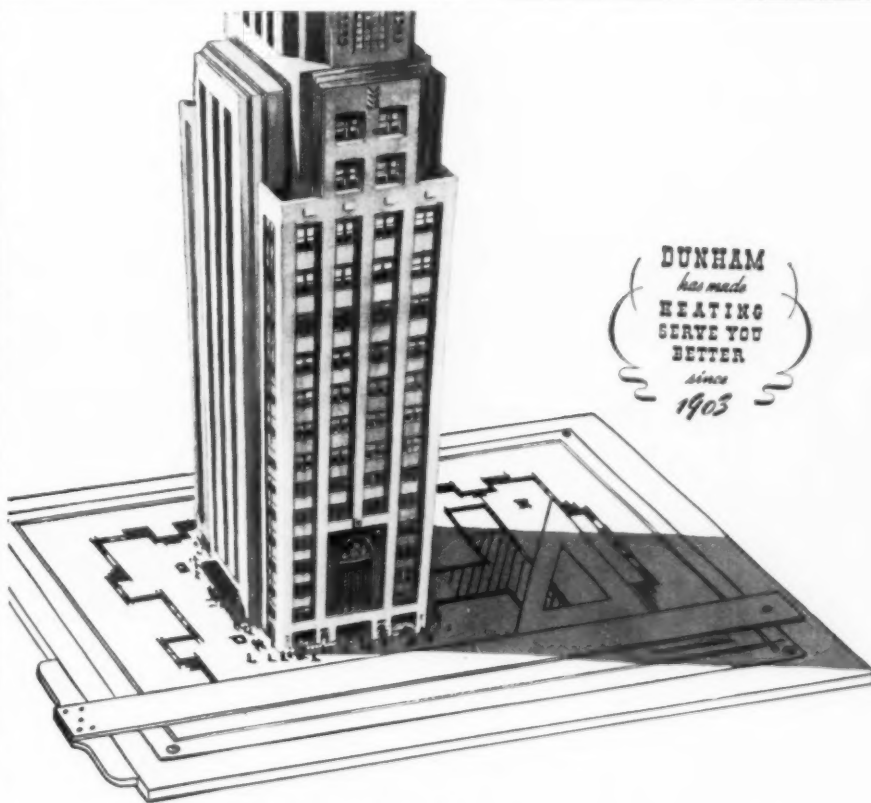
The attitude of business men, however, is anomalous, although the issue seems clear-cut. The hold on many communities has become so firm that men who once fought electric power cooperatives are now serving as directors in the "co-op." The pay rolls created by the W.P.A., N.Y.A., F.S.A., and various other agencies have taken the place of other pay rolls so completely that today the business man cannot fight because, if he wins his battle, he loses money.

Of course, this has come about because business has been attacked separately always.

Economic support was given first to a

few weaklings in every small city. The lessons of thriftlessness and laziness were allowed to sink in ("you'll get paid whether you work or lean on a shovel"). Then the doors were opened to everyone who could "get certified." The rush is still on; it has no parallel in our nation's history.

The system of giving away surplus food is the climax thus far, but it is doubtful if, now that capitalism is being choked to within an inch of its life in the smaller cities of the South, free enterprise will be allowed to breathe the breath of life again. Perhaps the defense program will bring a brief respite, but surely not for long, unless business men unite as never before.



A building comes to life when it's heated

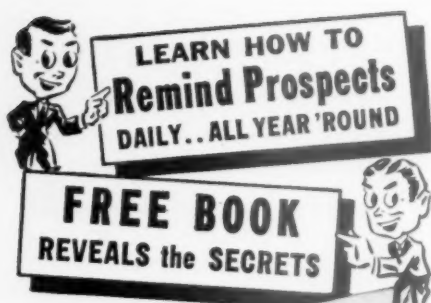
THE beauty—the strength—the rhythm of lines in the vision of the architect create a monument to his skill. But when does that monument become a habitation?

A building lives when heat tempers it to the uses for which it was conceived—for work, rest or recreation. Since heating, therefore, makes serviceable the creation of the architect, heating becomes with him, his consulting engineer and his client a first consideration.

Buildings of every type, from coast to coast, prove that Dunham Heating increases the comfort and efficiency of mankind, decreases the operating and maintenance costs of heating. An unusually graphic brochure on heating with "Sub-atmospheric" Steam is available. Write for brochure No. 614.

"Dunham Heating Service" is available through the telephone in more than 60 cities, or by correspondence to C. A. Dunham Co., 430 E. Ohio St., Chicago.





Learn how thousands of progressive business firms use imprinted **AUTOPOINT** products to sell new ideas, build goodwill, open new accounts. Every **AUTOPOINT** item is designed for daily use. Think of the amazing results when your imprinted name and sales message are flashed before "buying eyes" daily throughout the year. Write for "37 Sales Plans" and illustrated catalog of more than 70 **AUTOPOINT** Business Gifts—shows money-saving quantity prices. Sent **FREE** to executives

Retailed by Leading Dealers

Deluxe **AUTOPOINT** pencil*. Streamlined clip, graceful inlaid crowns on cap and tip—choice of six beautiful colors. Gives years of smoother, easier writing. Famous "Grip-Tite" tip—lead can't wobble, twist, or fall out.

Daily Date Calendar*—smartly streamlined. Pad always level with top... eliminates "empty" appearance. "V-slotted" calendar sheets are easily pulled out—no unsightly stubs.
*Made of **BAKELITE** molding material.

No. 157

Autopoint
THE BETTER PENCIL
REG. TRADE MARK

Available for Standard or Real Thin Lead

MAIL COUPON NOW!

AUTOPOINT CO., 1814 Foster, Chicago, Ill.
Please send Free "37 Sales Plans" and Auto-point Business Gift Catalog. (Sent to executives)

Name..... Title.....
Firm.....
Bus. Address.....
City..... State.....

When You Change Your Address

... please notify us promptly. Your copies of *Nation's Business* will then reach you without delay and without interruption.
—**NATION'S BUSINESS**, 1615 H Street, N.W., Washington, D. C.

when the
NATION'S BUSINESSMEN
go to Washington
RATES FROM \$5
THE **Carlton**
1615 H STREET - WASHINGTON, D. C.

★ ★ ★ ★ ★ ★ ★ ★ ★ ★

Thinkative Counter Selling...

It's so rare that
buyer may have
to sell salesman

★ ★ ★ ★ ★ ★ ★ ★ ★ ★

Selling money. A talkative hombre is my luggage man. What is more (it by no means always follows) he is thinkative.

One day last summer when I was the proud possessor of a sufficient number of burning shekels to take Herself and me to the mountains for coolth, I went to his place to replenish my traveling kit. He sold me exactly what I wanted, not even trying to make me want something I didn't want, telling me truth with almost stunning suddenness every time I asked him a question—he was a gatling-gun truther.

And, when I had bought the stuff, he showed me how to pack. Never before, in



all the years I had been skedaddling around our country and others had I seen a suitcase packed as he packed that one, or in as little time. He showed me, moreover, how to pack Herself's dresses. But so great was the confusion in my own poorly-packed mind after I had left him, I couldn't pass along the information.

So next morning I did a very, very presumptive thing. I telephoned him at his home, and he drove by my place on his way to work, stopping at our house and showing us both exactly how to pack wardrobe trunks and airplane cases. We loved him for it.

In the course of our interview, he expatiated on a hobby of his—salesmanship of goods rather than of prices.

"The other day a man with unusually broad shoulders came into my place and asked: 'Do you sell luggage?' Our walls being lined with the stuff, I first thought the question foolish, but I didn't betray

the thought. I said, 'Yes, sir, we sell luggage.'

"Then he said, 'I guess you don't have any that would easily pack coats as broad as mine.' 'Yes,' I said, 'I think we can fix you out.'

"I got a case and showed it to him, inside and out. I took his coat and packed it in the case, without wrinkling. He said, 'That's just what I want. How much?' I said, 'Sixty-five dollars.'

"He reached into his hip-pocket, extracted the cash, paid me and carried off the goods.

"But before he went, he said, 'Do you know why I asked that goofy-sounding question when I first came into your place walled with luggage?' I didn't know, and I asked him why. He said, 'I have a friend in this town in the luggage business.'

"I felt an inclination and an obligation to buy from him. So I went to his store and accosted a salesman, telling him I wanted a suitcase.

"He reached right across the counter, grabbed the first one in reach, and dragged it out, naming the price as he did so. I said I was afraid that might not do for my coats. At once he made another grab, and priced it.

"Price was all he talked. He said nothing—even if he knew anything—about the merits or the suitability of the goods; he knew the price. I hadn't gone in there to buy money, but a traveling bag. So I left. When I came in here and asked for a suitcase, you got the one you thought might suit me. You evidently had the idea that what I had in mind was a suitcase. Apparently you thought that was my first objective, the spending of the necessary money the next thing. You first gave me what I wanted; then, when I asked, you named the price.'

"I believe," continued my lingual luggageeur, "most people could be handled better that way than by talking nothing but price, ignoring the suitability or the quality of the goods. First, show him what he wants, then sell it to him. At the time of the sale is the time for discussion of price, and then only after he asks for it.

"Very few if any people walk into a shop and say, 'I want a \$2 hat.' Most of them say, 'I want a hat.' It is proper, to save time, if price is confessedly an object to the customer, for him to name a price limit above which he does not feel like going.

"But when the customer says nothing about price, it is presumable that his first consideration is being suited with the goods, and that he is prepared to pay for the gratification of his wish. And to begin naming low prices only, to a customer who has not mentioned money, is a crass insult; a virtual statement, 'Well, cheapskate, here's something about your speed!'

There should be more salesmen of his kidney, salesmen and saleswomen who devote themselves exclusively—until money has been mentioned—to suiting the customer.

So many salespeople, when you point to goods on the shelf and ask, "What's that?", answer, "That's 90 cents a yard." Which doesn't answer the question or al-

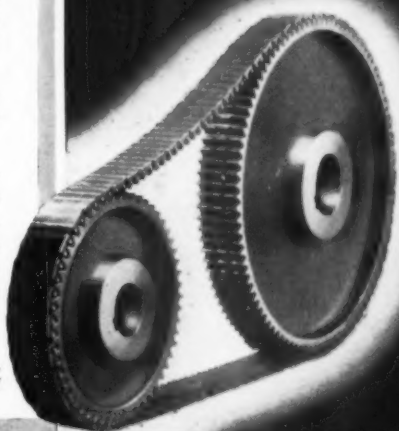
—STRICKLAND GILLILAN.

1. Always dress your best before going into a swanky store. In a dowdy garb you might be mistaken for a proletarian and never get to see the goods you want because the salesman has sized you up and thinks you haven't the money to pay for them.
2. Be sure you are thoroughly informed on the article you want to buy; then you won't have to embarrass the salesman by asking any questions.
3. When two or more salespeople are conversing as you enter the store do not interrupt their conference. Make yourself as inconspicuous as possible, then, when you are noticed, you will have the clerk in a selling mood and may be able to induce him to part with what you are seeking.
4. It may save time to give some attention to what in selling parlance is known as the "pre-approach." Learn who the salesmen are, call them by name and discuss their hobbies.
5. If you are asking for something that is not in the current mode—a straight razor or long underwear, perhaps—be tactful. Say that you're buying it for an old man who works in your garden.
6. In a rare old book shop it's considered vulgar to buy a book to read. You may recommend yourself by observing that some vandal owner has cut the leaves on a first edition.
7. Keep your coat buttoned and your hands out of your pockets so you won't be suspected as a shoplifter.
8. Don't be selfish. Talk in "you" language—that is, in terms of what will benefit the store, not yourself.
9. Never be so mercenary as to object to a price. It's like proffering a ten-cent tip in Park Avenue hotel.
10. Never commit the indignity of asking a floorwalker to sell you something.

—FRED DEARMOND.



**For example—On an 8" wide drive recently designed, a 20" wide sheave would have been required.*



SILENT CHAINS

ROLLER CHAINS

FLEXIBLE COUPLINGS

CLUTCHES

MORSE *positive* DRIVES

MORSE CHAIN COMPANY ITHACA N. Y. DIVISION BORG-WARNER CORP.

“What’s Ahead for America?”

You should plan now to come to Washington to attend the 29th annual meeting of the Chamber of Commerce of the United States for a comprehensive discussion of the problems which this question presents to business.

NEXT STOP ST. LOUIS!

AND MY STOP IS HOTEL Mayfair!
TOPS IN FOOD & SERVICE-AND RIGHT DOWNTOWN



See
WOODSTOCK
TYPEWRITER

Let's Look At An X-RAY PICTURE

by Westinghouse



• *This is an x-ray picture. It isn't half as exciting as the pictures you see at the movies or those you make yourself. But for sheer importance, x-ray pictures top them all.*

• *The design and manufacture of the equipment that makes these x-ray pictures is one of the most interesting and exacting branches of our business. One of the reasons is its variety, for today, both industry and the medical profession make many uses of x-rays. Most equipment must be specially engineered. With the exception of a few models, it's the kind of business that can't be catalogued.*

• *Here are some of the ways that x-rays serve today. Armor plate may look flawless on the surface, but still have treacherous, weak spots inside. So, x-rays are flashed through inches of steel, because in the Navy Yards they refuse to guess on the toughness of a battleship's hide.*

• *In the foundry, x-rays are used to inspect castings. Welds on pressure vessels that must hold hundreds of pounds of live steam are*

checked with x-rays. Scientists in the laboratory look inside of bugs and plants and textiles with x-rays. Museums x-ray doubtful portraits to see if there's another sketch beneath the "old master."

• *But, much more important than any of these, is the day-by-day job of x-rays in preserving health and curing disease. The army makes x-ray pictures of chests of the men it calls into service. Health authorities send traveling x-ray equipment, even into the remotest districts, to examine school children.*

• *In many of the country's great industries everybody—from the president to the apprentice—is x-rayed to make sure that he is physically fit for his job.*

• *You'll find it an interesting experience to talk to a roentgenologist—a physician who specializes in this fascinating branch of medicine. Ask him to let you look at a radiograph—an x-ray picture. It may seem just a blur of grays and whites and blacks. But he can read those strange shadows cast by invisible light on a photographic film and show you how they make it possible to recognize tuberculosis and many other diseases early enough for treatment to be really effective. And he'll explain to you how those same x-rays can often cure cancer that once would have been declared hopeless.*

• *X-rays serve an almost unbelievable variety of purposes. So it is only to be expected that at our Long Island City, N. Y. plant, where x-ray apparatus is built, you will find a surprising variety of equipment. We at Westinghouse enjoy working in this field, because its many problems offer a constant challenge to research and engineering.*

More than likely there's a Westinghouse X-Ray Office in your city, or very near-by. You'll find it listed in the classified section of the telephone directory. If these men can be of service to you, feel free to call upon them any time. Headquarters address is: Westinghouse X-Ray Division, Long Island City, New York.

Index of ADVERTISERS

April • 1941

	Page
Addressograph-Multigraph Corporation	73
Aetna Fire Group	10
Air Transport Association of America	90
American Mutual Liability Insurance Co.	6
American Telephone & Telegraph Company	114-116-118-120-123-124
Armstrong Cork Company	91
Association of American Railroads	3
Austin Company, The	67
Autopoint Company	126
Babson's Reports, Inc.	117
Bendix Aviation Corp.	75
Burgess Battery Company	92
Burroughs Adding Machine Company	29
Butler Manufacturing Co.	112
Canadian Pacific Railway Company	124
Carlton Hotel	126
Chamber of Commerce of the U.S.A.	127
Chase National Bank, The	105
Chesapeake & Ohio Railway Co.	4
Chevrolet Motor Company	69
Chicago Watchlock Corporation	120
Chrysler Corporation	77
Commercial Credit Company	86
Cutler-Hammer, Inc.	95
Cyclone Fence Company	98
Dunham, C. A., Company	125
Ediphone, The Thomas A. Edison, Inc.	102
Equitable Life Assurance Society	129
Erie Railroad System	103
Fairbanks-Morse & Company	2-108
Felt & Tarrant Mfg. Co.	65
Fleur-O-Lier Mfrs.	119
Frankfort Distilleries, Inc.	2nd Cover
Frigidaire Corporation	110
Fruehauf Trailer Company	87
General Electric Company	130
Goodyear Tire and Rubber Company	12
Hartford Steam Boiler Insp. & Ins. Co.	9
Hershey Manufacturing Co.	122
Home Insurance Company, The	113
Household Finance Corporation	11
Illinois Development Council	101
International Business Machines Corp.	120
Kimberly-Clark Corporation	81-82-3rd Cover
Lennox Hotel	122
Lumbermens Mutual Casualty Co.	89
Marchant Calculating Machine Co.	106
Mayfair Hotel	127
Medusa Portland Cement Co.	100
Metropolitan Life Insurance Company	31
Morse Chain Company	127
National Cash Register Company	88
National Distillers Products Corp.	4th Cover
Norfolk & Western Railway Company	7
Northwestern Mutual Life Insurance Co.	93
Oxford Filing Supply Co.	116
Pacific Gas & Electric Company	118
Peerless Pump Div., Food Machinery Corporation	122
Pennsylvania, Commonwealth of	107
Pitney-Bowes Postage Meter Company	111
Pittsburgh Plate Glass Company	85
Pittsburgh Steel Company	121
Plymouth Motor Corporation	1
Prudential Insurance Company	123
Republic Rubber Company	115
Sealtest, Inc.	109
Service Recorder Co.	122
Shell Oil Company, Inc.	79
Standard Accident Insurance Co.	99
Underwood Elliott Fisher Company	8
Victor Adding Machine Co.	97
Western Electric Company	71
Westinghouse Electric & Mfg. Co.	128
Woodstock Typewriter Company	127
York Ice Machinery Corporation	14